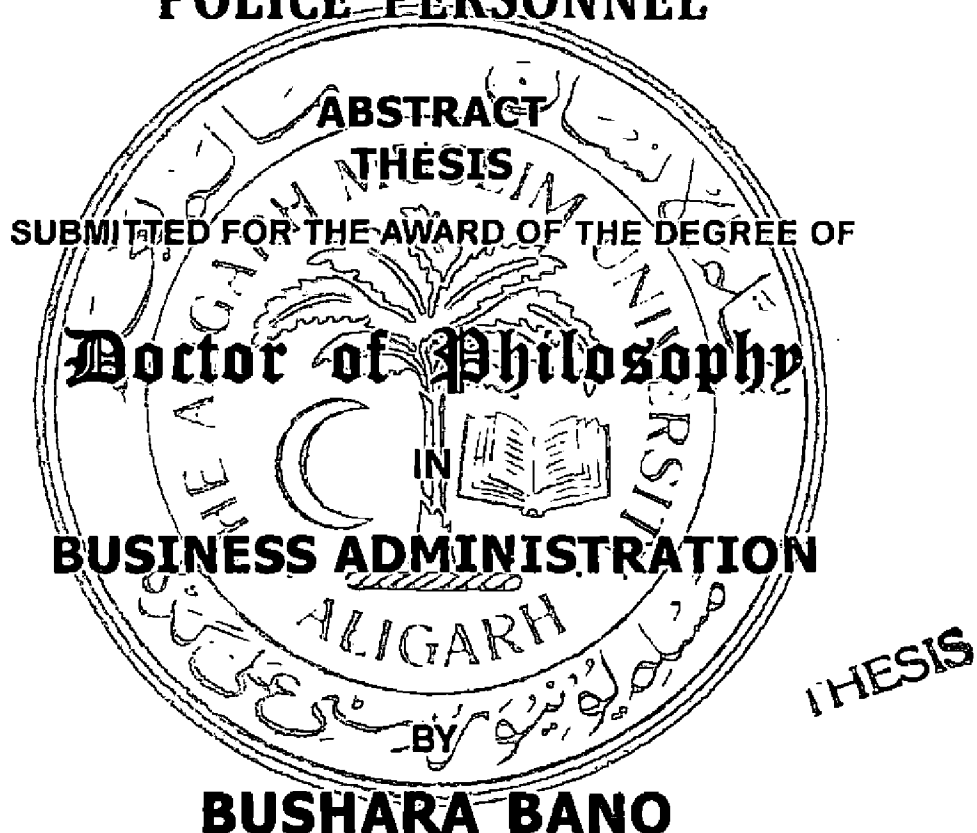




**PERSONALITY TYPES AND ITS RELATIONSHIP  
WITH ROLE STRESS: A STUDY AMONG  
POLICE PERSONNEL**



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## Abstract

### 1. Introduction

Police is prominent organ of the society. Police personnel are the most visible arm of the government. They are needed in the society at the time of a danger, crisis or difficulty. Hence they are expected to be more accessible, interactive, responsive and dynamic organization of any society. Naturally, the duty and functions of police personnel are varied and multifarious. At the same time, the job of police personnel is complicated, elusive and problematic. Primary functions of the Police are to *prevent the crime* and *maintenance of law & order*. Peace and order are essential prerequisites for development of any country. Thus, police plays a vital role in country's development. It detects, fights, arrests and controls the enemies of peace and public order.

Stress may occur due to under-load and overload of matter, energy and information of internal and external environment. Internal environment may include frustration, personal goals, conflicts, and anxiety or tension of the individual. External stressors may consist of demands, conflicts, pressure and information from the surroundings of the individual. These antecedent conditions may create stress within the individual.

Police personnel are exposed to various stressors that are significantly different, in terms of quality and quantity to those experienced by the general population. They are reported to have higher rates of substance abuse, divorce, suicide, cynicism, burnout, job dissatisfaction, and lower morale vis-a-vis members of other professions. This is not surprising considering the inherent dangers and challenges police face in the course of their duties. The job profile of a police officer includes witnessing a fellow officer killed in the line of duty, killing someone in the line of duty, recovering bodies from motor vehicle accidents, witnessing domestic or community violence, responding to cases involving child abuse and neglect. Police personnel face variety of stressors or job pressures due to their role. The job pressure for police officer include the responsibility of protecting the public, constant exposure to other people's problems, emotional distancing from others, the inactivity/crisis see-saw, maintenance of macho defenses, bipolar thinking, negative public image of police, a web of personal puzzles and job catastrophes.

Stress leads to some reactions termed as *strain* or stress reactions. There are three types of stress reactions for police officers namely *physiological*, *emotional* and *behavioral*. *Physiological* reactions may be termed as having higher than normal probability of death from certain illnesses specifically heart attack and health problems such as headaches, high blood pressure and stomach problems. *Emotional* reactions may include depression and extreme cases of suicide, sometimes due to severity, it can create posttraumatic stress disorder (PTSD). On the other hand, *behavioral* reactions may entail reduced level of job performance, errors of judgment, irresponsibility, low morale, absenteeism, tardiness, early retirement and quitting the police service altogether at the level of organization. Similarly, at the individual level, they can experience aggression, violence, isolation, excessive drinking, smoking, alcoholism and drug abuse.

Individuals differ dramatically in their response to a problem or a stressor, as some people are born with a temperament that predisposes them to higher or lower levels of tolerance to stress. Previous researches have shown that certain personality traits could render an individual more prone to the effects of stress and burnout. Personality has been demonstrated to influence both health related and everyday behaviors, and is also related to an individual's appraisal of a stressful experience. The personality traits are able to account for approximately 10% of the variation in an individual's behavior. Personality may thus predispose individuals to, or act as a buffer against the development of ill health and stress.

## **2. Stress in police personnel of India**

In India, the presence of stress among police is felt but not well documented and researched. Media often reports of police brutality and indiscipline but does not acknowledge about the inherent stress in police work. It was also reported that in Delhi alone, at least five Delhi police officers commit suicide every year due to work related stress. Stress among lower level functionaries is even more grave. Recently, there have been some incidents wherein constables killed their senior officers. It was reported that a CRPF constable, having depressed and frustrated due to not getting proper treatment killed his senior officer (HT, July 2010). Again a constable committed suicide due to stress (HT, January 2011). Crime statistics reveal that number of suicides among police personnel are increasing over the years. These



suicides identify that police personnel of India are experiencing high level of stress. These stressors can become a growing disease which may undermine the efficiency and potential of the police force. Timely intervention can prevent much of the damage due to stress. It is said that to recognize the problem is itself a major step in handling it effectively. Thus, the present study makes an attempt to investigate the nature of stress experienced by the police personnel.

### 3. Literature Review

The central concern of the research was to explore the link between personality and stress among police personnel. For perusing the literature under this theme, thematic review approach was followed. Literature has been perused under six sections namely – *studies on stress*, *studies on personality*, *studies on personality & stress*, *studies on police stress*, *studies on police personality* and *studies on personality, stress & police*. These sections were further divided into various sub-sections based on *International studies* and *Indian studies*. More than 400 research papers and articles were reviewed for the present study. Out of which, around 100 research papers were noted as focusing on the themes identified in the sections and sub-sections.

The section of *studies on stress* concluded that almost all the occupational groups are experiencing stress at workplace. It is also evident that stress decreases job satisfaction and organizational commitment. The employees experiencing work stress are under threat of physical and psychological disorders. They also report an intention to leave the organization. While comparing the nature and intensity of stress, it is evident that ATC, police, doctors and nursing are relatively more stressed occupations than others. Although different occupational groups have different role stressors but most of them are experiencing *Inter Role Distance* and *Resource Inadequacy*. It is also noted that female employees are experiencing more stress than their male counterparts.

It may be noted from the *studies of personality* that *Neuroticism* has a negative association with risk taking, sensation seeking and spiritual intelligence while it is positively correlated with depressive symptoms and negative emotions. *Neuroticism* increases with age. On the other hand, *Extraversion* and *Emotional Resilience* are positively correlated with job satisfaction and career satisfaction. It was also reported that certain personality traits such as *Neuroticism*, *Anxiety*, *Sensation Seeking*,

*Hostility* and *Introversion* could make the individuals more vulnerable to stress while certain personality traits such as *Extraversion*, *Activity*, *Sociability* and *Conscientiousness* could decrease the stress level of the individuals.

The review of literature on *studies on police stress* revealed that major stressors for police personnel are both job related and organizational related. The job related stressors are routine job demands, work overload, exposure to crises, physical attacks, death or injury of fellow police officer and negative encounter with public, court as well as with media. The organizational stressors for Indian police personnel are negative work environment, negative relationship with coworkers and seniors, lack of promotion, unfair practices to enforce discipline, bureaucratic interference and shift work. The review also revealed that political pressure, lack of time for family, negative public image, inadequate salary, work overload, death/injury of fellow officer on duty, negative relationship at workplace, lack of promotions and time/job pressure are the potent sources of stress among police personnel.

On the basis of the review of these studies it can be deduced that police personnel are experiencing high level of stress across the world. Police personnel are the organs of government. Their performance is crucial for ensuring peace and stability in the society. Review of research on police stress indicates that the problem of stress is a severe one. It could act as a deterrent to effective job performance. The literature review also indicated that personality traits have a direct relationship with stress level of police. Personality traits could render an individual more susceptible to the effects of stress and it can also decrease negative emotions.

#### **4. Research Gaps**

Literature review helps identify certain research gaps. The major research gaps are listed below:

- Limited research studies have been carried out on police stress in Indian context.
- Some studies were carried out to examine role stress among Indian police personnel but they have limitations of sample size and longitudinal spread.
- There is need for more police specific studies using standard and open ended questionnaires so that the problem of stress could be understood in the larger context of occupational stress.

- Limited research work has been carried out exploring the relationship between personality traits and stress among police personnel in Indian context.
- Up to the best of author's knowledge no study has been carried out using the ZKPQ-50-CC for examining personality traits and ORS for measuring role stress simultaneously for police personnel worldwide.

### **5. Research Questions**

In light of the above discussion, the following research questions were crystallized:

1. What is the nature and intensity of role stress being experienced by police personnel in India?
2. What are the personality traits prominent in Indian police personnel?
3. What is the relationship between personality traits and role stress among Indian police personnel?

### **6. Objectives**

This study attempts to understand personality traits of police personnel and role stress amongst them. The study aims to understand and describe the reality of stress among police personnel. The study also aims to identify the influence and impact of personality traits on the level of stress among police personnel. Specifically, the study is intended to:

- to investigate the nature and dynamics of the role stress among police personnel
- to identify specific stressors causing stress among police personnel
- to assess the personality traits among police personnel
- to explore the relationship of personality traits and role stress among police personnel
- exploring differences, if any, in the quantum and type of stress between civil and state armed police
- exploring differences, if any, in the personality traits between civil and state armed police
- exploring the difference, if any, in the quantum and type of stress among Police Personnel across occupational groups, age, gender, rank, marital status, length of service, qualification, religious affiliations, place of posting and districts.

- exploring the difference, if any, in the quantum and type of personality traits among Police Personnel across different age, gender, rank, length of service and qualification.
- to propose managerial interventions to handle the stress among police personnel.

## 7. Hypotheses

The various major and sub hypotheses of study are listed below:

**H01: There is no difference in the nature and intensity of stress (measured through ORS and its ten constituent stressors) among police personnel.**

- H01a: There is no difference in the nature and quantum of stress among police personnel vis-à-vis other *occupational groups*.
- H01b: There is no difference in quantum and type of stress between *Civil Police* personnel and *Armed Police* personnel.
- H01c: There is no difference in quantum and type of stress among police personnel as per their *rank*.
- H01d: There is no difference in quantum and type of stress between *married* and *unmarried* police personnel.
- H01e: There is no difference in quantum and type of stress between *male* and *female* police personnel.
- H01f: There is no difference in quantum and type of stress among police personnel as per their *religious affiliations*.
- H01g: There is no difference in quantum and type of stress among respondents belonging to different *age* groups.
- H01h: There is no difference in quantum and type of stress among respondents having different *educational attainments*.
- H01i: There is no difference in quantum and type of stress among respondents having varying *length of experience*.
- H01j: There is no difference in quantum and type of stress between police personnel having *rural* vis-à-vis *urban* postings.
- H01k: There is no difference in quantum and type of stress among police personnel across different *districts*.

**Ho2: There is no difference in nature and spread of personality traits among police personnel.**

- Ho2a: There is no difference in personality traits among police personnel across *gender*.
- Ho2b: There is no difference in personality traits among respondents as per different *age* groups.
- Ho2c: There is no difference in personality traits among respondents having varying *length of experience*.
- Ho2d: There is no difference in personality traits among police personnel across *hierarchal levels*.
- Ho2e: There is no difference in personality traits among respondents between *Civil Police* personnel and *Armed Police* personnel.
- Ho2f: There is no difference in personality traits among police personnel as per their *educational attainments*.

**Ho3: There is no correlation between stress (measured through ORS and its ten constituent stressors) and different personality traits among police personnel.**

**Ho4: There is no impact of personality traits on stress among police personnel.**

- Ho4a: There is no impact of *Activity* on stress among police personnel
- Ho4b: There is no significant impact of *Sociability* on stress among police personnel
- Ho4c: There is no significant impact of *Impulsive Sensation Seeking* on stress among police personnel
- Ho4d: There is no significant impact of *Aggression-Hostility* on stress among police personnel
- Ho4e: There is no significant impact of *Neuroticism-Anxiety* on stress among police personnel

## **8. Research Methodology**

The research designs used in the study are descriptive and exploratory research design. Sample size of the present study is 500 police personnel. The sample for the study was selected from the civil and armed police of seven districts of the state Uttar

Pradesh, namely, *Aligarh, Agra, Kannauj, Farrukhabad, Hardoi, Auraiya and Jhansi*. Quota and convenience sampling was employed for collecting the data from police personnel. Three research instruments were used for data collection. First two instruments were standard questionnaire while the third one is a tailor-made, open-ended questionnaire. The stress among personnel was measured through Organizational Role Stress Scale (ORS). It has ten constituent stressors- namely *Inter Role Distance (IRD)*, *Role Stagnation (RS)*, *Role Expectation Conflict (REC)*, *Role Erosion (RE)*, *Role Overload (RO)*, *Role Isolation (RI)*, *Personal Inadequacy (PI)*, *Self Role Distance (SRD)*, *Role Ambiguity (RA)* and *Resource Inadequacy (RIIn)*. Personality traits were measured using Zuckerman Kuhlman Personality Questionnaire-Shorter version (ZKPQ-50-CC). It measures five major personality traits namely – *Activity (Act)*, *Sociability (Sy)*, *Aggression-Hostility (Agg-Host)*, *Impulsive Sensation Seeking (ImpSS)* and *Neuroticism-Anxiety (N-Anx)*. All the questionnaires were translated into Hindi, the official language of Uttar Pradesh police. In order to make suitable for the present study, both the scales were refined through item analysis (reliability analysis) and factor analysis (exploratory and confirmatory).

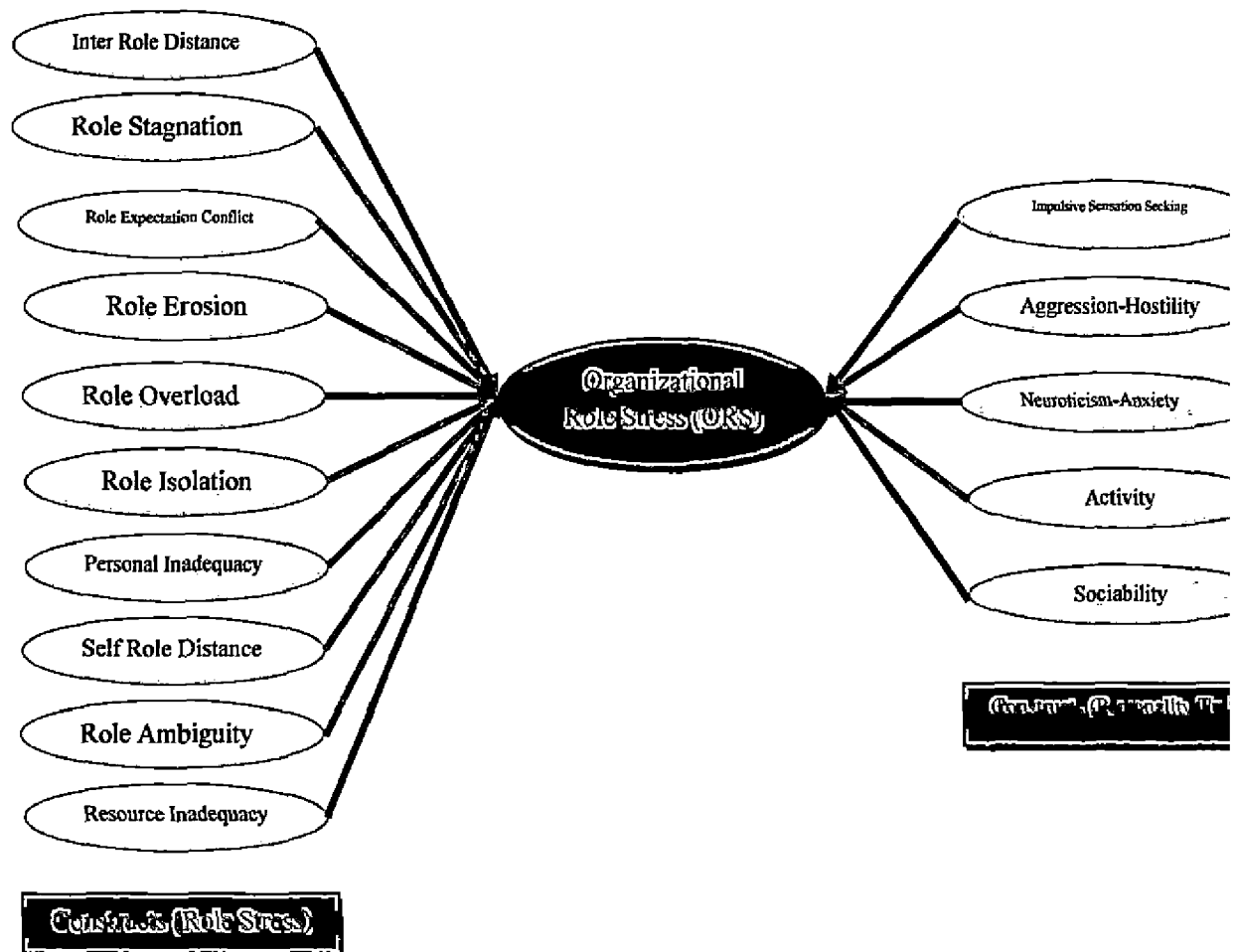
## 9. Hypothesized Research Model

Research indicates that variables like *Self-Efficacy*, *Self-Esteem*, *Locus Of Control*, *Emotional Stability*, *Extraversion*, *Conscientiousness*, *Positive Affectivity*, *Negative Affectivity*, *Optimism*, *Proactive Personality* and *Hardworking* impact highly on stress and burnout. However, limited studies exist exploring the relationship between personality variables and stress.

Studies have explored the role of personality traits in stressful life experiences and negative emotional outcomes. Personality plays a crucial role in health and psychological outcomes. Certain personality traits lower behavioral thresholds, rendering certain behaviors more likely and others less likely to occur. Stress response is one behavior affected by personality. Personality may trigger the stress process, starting from the evaluation of stress experience to the choice of coping strategies and ultimately to emotional outcome. Personality also influences how people react to stressful situations in their work place. Finally, it has been noted earlier that stress outcomes are partly determined by personality dispositions. Five broad personality

dimensions have been identified as stable personality traits, namely; *Impulsive Sensation Seeking*, *Aggression-Hostility*, *Neuroticism-Anxiety*, *Activity* and *Sociability*. The proposed research framework is presented in Figure 1.

**Figure 1: Hypothesized Research Model**



## 10. Pattern of Data Analysis

Descriptive statistics (e.g. mean) was used to measure the central tendency of the data. Two types of mean were calculated for the study- *arithmetic mean* and *cumulative mean*. Again, for measuring dispersion of the data from mean value, *Standard Deviation* (S.D.) was used. For ascertaining the differences among different groups of police personnel, *t-test* and *analysis of variance* (ANOVA) were used. To explore the relationship between personality traits and stress, *correlation analysis* was used. In order to test the influence of personality traits on stress, *regression analysis* was undertaken with the help of *Structure Equation Modeling* (SEM). To analyze the

responses collected through open-ended questionnaire, *percentage analysis* was used. The statistical analysis was carried out with the help of SPSS 18.0.

## **11. Limitations**

Important limitations of the study are presented below:

- The first limitation arises of its survey design. Survey research relies on self-report data, which may be inaccurate or manipulated by participants and/or environmental factors. Additionally, the non-random selection of the subjects may influence the generalisability of the findings.
- Lack of response is a major limitation of the study. This study had a response rate of 23.44% only. It was difficult to get respondents' full cooperation because of their lack of interest in the study. They had doubts about the utility of the study. They were of the view that such studies hardly result in the betterment of police personnel. Often the support of the senior officers was sought. Then, the respondent filled the questionnaire. Overall, a general apathy and hopelessness was observed among the respondents.
- Some of the respondents had genuine difficulty in understanding the way questionnaire was to be filled. The length of the survey questionnaire could potentially have created a bias in response due to the effects of fatigue. Other limitations such as measurement error, scaling issues, and non-response bias, may also have affected the current study.
- One major limitation of the study is non-inclusion of adequate representation of senior Gazetted officers. Efforts have been made for data collection from them but due to lack of time, they could not fill the questionnaire. However, they have supported the data collection in every possible manner. Another limitation of this study is that more males (87%) than females were included in the sample.
- Yet another limitation of the study is that it does not include more geographical area for study. It includes only seven districts of Uttar Pradesh.



## 12. Findings of the Study

### 12.1 Findings in respect of Role Stress

- **Overall Results;** The study revealed that police personnel are experiencing moderately high level of stress. However, a significant chunk of police personnel are experiencing rather high level of stress.
- **Key Constituent Stressors;** *Inter Role Distance* emerged as most potent stressor among police personnel followed by *Resource Inadequacy* and *Role Stagnation*.
- **Results as per Occupational Groups;** The study revealed that police personnel are experiencing highest level of stress vis-à-vis other occupational groups.
- **Results as per Type of Organization;** Civil police personnel are experiencing more ORS than armed police personnel. The major stressors responsible for this difference are IRD, RS, RO, RI, SRD and RIn. Maximum difference has been observed on IRD between civil and armed police. Although both groups are experiencing highest stress on this stressor but civil police personnel reported very high *Inter Role Distance*. Another major significant difference has been observed on RI between the two groups. Civil police personnel are experiencing higher RI than armed police.
- **Results as per Rank;** Lower rank police personnel are experiencing more role stress than middle and senior rank police officers. Significant differences have been observed on all stressors as per rank. IRD emerged as most potent stressor for all police personnel irrespective of their ranks. Significant differences have been observed on RA followed by PI and SRD. These stressors are not that bothersome for senior officers. However, lower rank police personnel are experiencing problems due to these stressors.
- **Results as per Marital Status;** No significant difference is observed among the respondents as per their marital status with respect to overall ORS. Significant difference has been observed on *Personal Inadequacy* in these two groups. Married police personnel are experiencing higher PI than unmarried police personnel.
- **Results as per Gender;** Female police personnel are experiencing higher ORS than their male counterparts. The stressors responsible for this difference are IRD, RS, RIn and RO. Although IRD is most potent stressor for both the group, female

police personnel are experiencing very high IRD. Another major difference has been observed on *RS*. Female police personnel are experiencing higher *RS* than males.

- **Results as per Religious Affiliations;** No significant difference is observed among the respondents on overall ORS as per their religious affiliations. As regards individual stressors, only one significant difference has been observed on *Role Ambiguity* only. Hindus are experiencing more RA than Muslims.
- **Results as per Educational Attainments;** Less qualified personnel are experiencing higher level of ORS than moderately and highly qualified police personnel. Maximum differences have been observed on two stressors i.e. RA and REC. Less qualified police personnel are experiencing higher ambiguity and conflicts than the respondents having higher level of educational attainments.
- **Results as per Length of Service;** Significant differences have been observed on overall ORS among respondents having varying length of experience groups. Respondents belonging to early hard core police phase reported higher level of ORS than other groups. As regards constituent stressors; RO accounts majorly for difference as per length of service. Police personnel in early hard core policing phase are experiencing higher level of RO than other groups. Significant differences have also been observed on IRD and RIn. Police personnel in early hard core policing phase are experiencing higher stress on account of these stressors.
- **Results as per Place of Posting;** Rural police personnel are experiencing higher ORS than their urban counterparts. Significant difference has been observed on IRD with rural police relatively more stressed on this account. In addition, rural police is experiencing higher RI than urban police. Difference has also been observed on RO with rural police emerging as more stressed group on this account as well.
- **Results as per Districts;** Significantly different stress was reported among respondents across districts. RI accounted majorly to this difference. *Kannauj* police is experiencing more *Role Isolation* than other district police forces. *Kannauj* police is reported experiencing more stress on RO as well.

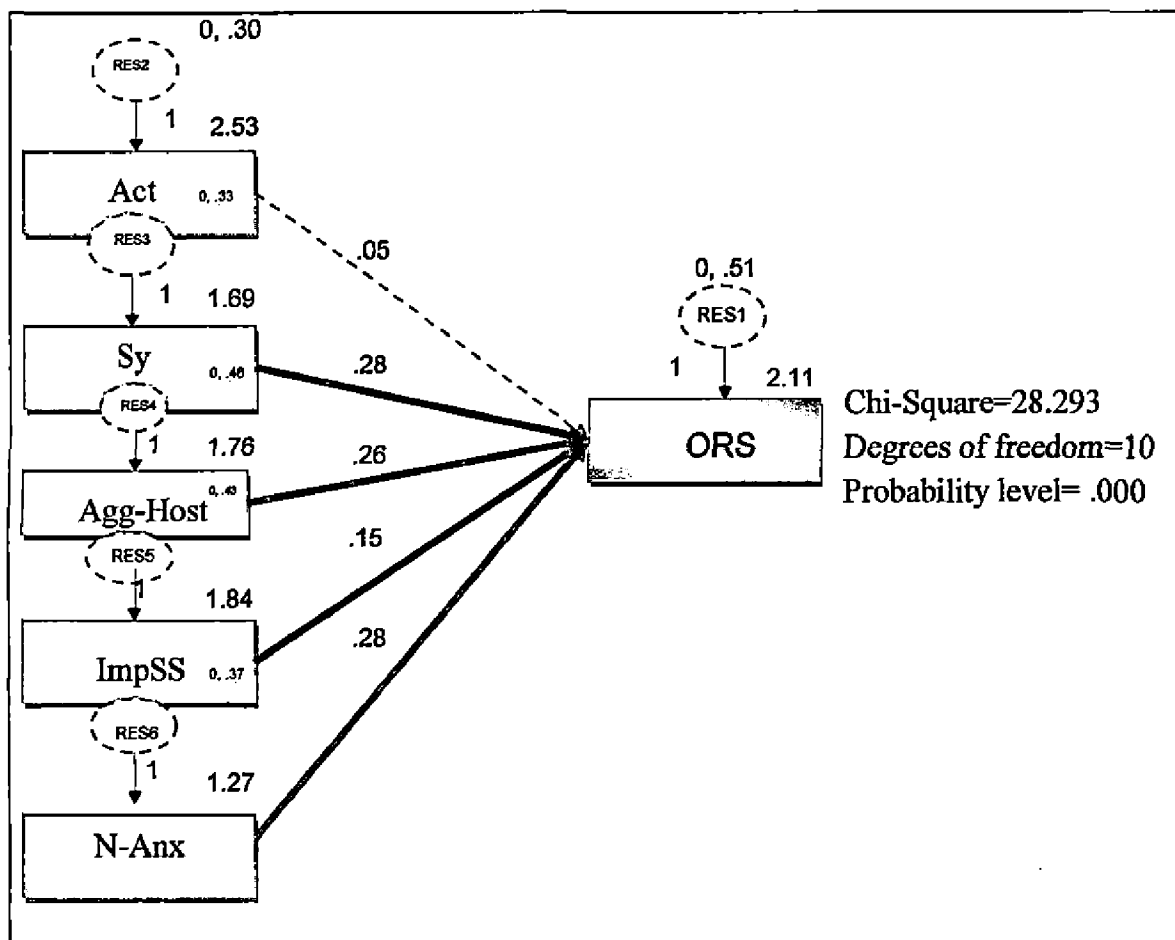
## 12.2 Findings in respect of Personality

- **Overall Results;** The findings of the study revealed that police personnel have significantly varied personality orientations. *Activity* orientation emerged as the prominent personality trait among police personnel followed by *Aggression-Hostility* and *Sociability*.
- **Results as per Gender;** Respondents reported significant differences on two personality traits namely- ImpSS and N-Anx across gender. Male police personnel are reported to be high *Sensation Seekers* while females reported higher scores on N-Anx.
- **Results as per Age;** Significant differences have been observed on three personality traits, namely- Act, Sy and ImpSS. The mid-senior age group was found to be most active. The senior most age group scored higher on *Sociability* and *Sensation Seeking*.
- **Results as per Length of Service;** As per length of service, significant differences have been observed on four personality traits, namely- Act, Sy, Agg-Host and N-Anx. The most experienced group reported to be most active and most social. It also reported higher score on *Aggression-Hostility* and *Neuroticism-Anxiety*. But, Middle experience group scored highest on *Neuroticism-Anxiety*.
- **Results as per Rank;** Police personnel reported significant differences on three personality traits namely- Sy, ImpSS and N-Anx as per their ranks in the hierarchy. Lower rank police personnel were found to have highest scores on *Sociability*, *Impulsive Sensation Seeking* and *Neuroticism-Anxiety* compared to other hierarchal levels.
- **Results as per Type of Organization;** Significant differences have been reported on two personality traits namely- Agg-Host and N-Anx as per type of organization. Civil police personnel reported higher score on Agg-Host compared to armed police personnel while armed police reported higher scores on N-Anx than civil police personnel.
- **Across Educational Attainments;** On the basis of qualification, no significant difference has been observed on any personality trait.

### 12.3 Findings with respect to relationship between ORS and Personality Traits

- The study reports significant correlation between various personality traits and ten constituent stressors of ORS. Further, Personality traits of police personnel had significant impact on overall ORS scores.
- Except *Activity*, remaining four personality traits exhibited a positive correlation with various constituents of ORS. Similarly, except *Activity*, other personality traits namely- *Sociability*, *Aggression-Hostility*, *Impulsive Sensation Seeking* and *Neuroticism-Anxiety* are found to have significant impact on total ORS among police personnel. Figure 2 depicts the refined hypothesized model of the study.

Figure 2: Refined Structural Model



## 12.4 Summary of Hypothesis Testing

The above discussion explains major findings of the study. Table 1 presents a summary of the results of hypothesis testing:

**Table 1: Summary of Hypothesis Testing**

S. No.	Hypothesis	Sub-hypothesis	Variables	Remarks
1.	Ho1	Ho1	Overall ORS	Rejected
		Ho1a	Vis-à-vis other occupational groups	Rejected
		Ho1b	Type of Organization	Rejected
		Ho1c	Rank	Rejected
		Ho1d	Marital Status	Not Rejected
		Ho1e	Gender	Partially Rejected
		Ho1f	Religion	Not Rejected
		Ho1g	Age	Not Rejected
		Ho1h	Qualification	Partially Rejected
		Ho1i	Experience	Partially Rejected
		Ho1j	Place of posting	Rejected
		Ho1k	District	Rejected
2.	Ho2	Ho2	Personality Traits	Rejected
		Ho2a	Gender	Partially Rejected
		Ho2b	Age	Partially Rejected
		Ho2c	Experience	Partially Rejected
		Ho2d	Rank	Partially Rejected
		Ho2e	Type of Organization	Partially Rejected
		Ho2f	Qualification	Not Rejected
3.	Ho3		Correlation	Rejected
4.	Ho4	Ho4	Overall Impact	Rejected
		Ho4a	Act on ORS	Not Rejected
		Ho4b	Sy on ORS	Rejected
		Ho4c	ImpSS on ORS	Rejected
		Ho4d	Agg-Host on ORS	Rejected
		Ho4e	N-Anx on ORS	Rejected

Data analysis of open-ended questionnaire helped identify top key stressors for police personnel in India. These stressors are *Non grant of leave on time, Non-fulfillment of family responsibilities, Exploitation by senior officers, Political Pressure, Workload, Unlimited duty hours, Living away from family, Inadequate salary, Transfer/lack of promotions and Lack of cooperation from public*. The condition is so gloomy that most (73%) of the respondents don't want their children to be in the same profession.

It is therefore imperative to initiate timely interventions. Stress among police personnel directly affects the whole nation.

### **13. Conclusion**

In the light of above findings it can be concluded that police personnel in India are exhibiting clear signs of high work related stress. *Inter Role Distance*, *Resource Inadequacy* and *Role Stagnation* emerged as three key stressors among police personnel. Interventions are needed to cope with this stress. It can also be concluded that personality traits have a significant influence/ impact on stress among police personnel. Factors that can reduce an individual's stress level include individual factors (personality, coping and psychological health), familial factors (functioning and support of a family) as well as extra-familial factors (support from the community).

The study also suggests that certain combinations of the personality traits such as *Sociability*, *Aggression-Hostility* and *Neuroticism-Anxiety* are important for stress in police personnel. *Non grant of leave* and *exploitation by senior officers* have emerged as two most potent stressors among Indian police personnel. Police organizations should also analyze its consequences on effectiveness of police force. The study suggests major reforms in police organizations and also job redesign and job enrichment of the police personnel especially for lower rank. In addition, the field of stress still lacks an integrative framework which can explain the phenomenon and the majority of research results logically, under an established theoretical framework. There is a realization that stress, whether at workplace or elsewhere should be designed keeping the specific target group i.e. police personnel in mind. The individual personnel should remain at center-stage of any effort of stress management. A stress free police shall ensure effective working of police organizations. This will result in reducing crime rate. Investigation of police stress carried out in the present study is expected to increase awareness of the problem especially at the lower rank police personnel. It may become the basis for launching interventions to address the problem of stress among them. The combined approach of human relationship expertise and human resource management could help address the issue of stress

among police personnel. The conclusion of the study largely corroborates the existing literature in the area.

#### **14. Managerial Implications**

While certain jobs are more stressful than others, individuals do differ in their response to stress situations. The police organizations may administer personality tests at the time of selection and placement of police personnel. It will help select individuals more suitable for police job. While recruiting the personnel, personality tests and psychological assessment is necessary in order to select those individuals who are fit for the job. Moreover, even if persons who are not ideally suited for policing job get recruited, police organizations may design different stress management interventions for different police personnel based on their personality traits. The common interventions may be *transparent process of grant of leave, Time Management, Recreational Facilities, Spouse Involvement Programs, Sensitivity Training, Training in Conflict Resolution Skills, Peer Counseling, Job Rotation, Job Redesign, Time Management, Realistic Expectations* etc.

There is need to explore the phenomenon of relationship between personality and stress further to increase awareness among police personnel and general public in India. This shall be the foundation for individual and organizational efforts to manage it. It requires an *official recognition of workplace stress* and illness from police organizations, society and government. The problem may be well tackled by application of health and safety legislations. Government need to recognize that policing is a stress prone job. It may then make it mandatory to provide for an effective prevention system. There is also a need of separate commission and laws for governing workplace stress related issues. Such legal enforcement would facilitate tackling the problem of stress. There is also a need of recruiting *Psychologists* and *Criminologists* at district level to contribute to this arduous task.

#### **15. Future Research Directions**

This research study has substantial scope of extension- both in terms of breadth as well as depth. Some of such areas are highlighted below:

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- Breadth wise it may be extended to several other groups of police personnel. They may exhibit unique patterns of stress. In addition to law and order police, the groups involved in carrying out other auxiliary services may thus be studied. The differences could also be explored in changed geographical context. The districts where crime rate is higher could be explored and the results can be compared with those districts wherein the crime rate is relatively low. Comparative studies could be launched focusing on host of Central paramilitary forces. Comparison could also be carried out among states.
- Similar studies could also be carried out among police organizations of different countries. It will help explore the specific stressors in different context of policing. In addition, the cross cultural comparison may throw useful light in understanding this phenomenon better. It may also enable us to take stock of good practices to address the concern.
- Indian research studies on police stress have most used questionnaires that have a general orientation and that have been used in varied occupational contexts. Police organizations encounter specific stressors. Therefore, there is a need to develop police specific questionnaires. This shall help understand reality of stress among police personnel more specifically.
- Understanding the sources of stress is just one aspect. Another aspect, perhaps even more important, is the management of stress. Existing literature on the subject reveals that management of stress is not that well researched area. A number of researchers are working in this field in western countries. There is need to crystallize approaches for handling this problem in different geographical as well as occupational settings. Management of stress in different organizational settings in the same organization as well as across the occupations is a pressing need of the hour.
- Future researches could explore personality profile of the police personnel more deeply. This study reported that police personnel are hostile. It could be researched why they are hostile and aggressive in comparison to general population. More research is also needed to develop stress management techniques based on personality traits of police personnel.



- The study focused on two variables only, namely- personality traits and stress. More variables could be included in longitudinal studies to understand their relationship with police stress in India such as job satisfaction, performance, burnout, vigor, depression, well-being, health, suicide ideation and coping styles.

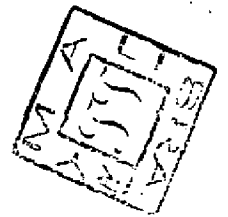


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**THESIS**  
SUBMITTED FOR THE AWARD OF THE DEGREE OF

**Doctor of Philosophy**  
IN  
**BUSINESS ADMINISTRATION**

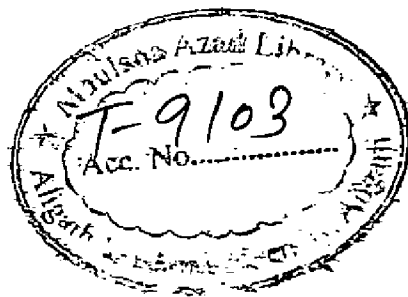
BY  
**BUSHARA BANO**



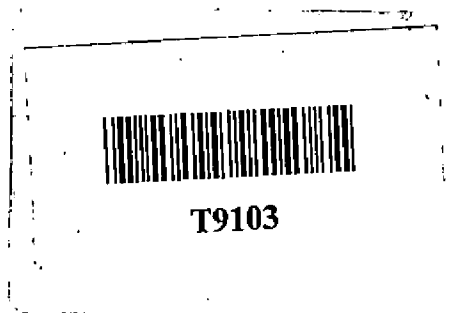
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**DEPARTMENT OF BUSINESS ADMINISTRATION  
FACULTY OF MANAGEMENT STUDIES & RESEARCH  
ALIGARH MUSLIM UNIVERSITY  
ALIGARH-202002 (INDIA)**

**2013**



8 NOV 2014



*I dedicate this thesis to  
my Family specially my Parents  
for their unconditional love &  
support.*



## DECLARATION

I do hereby declare that the thesis titled **“Personality Types and its Relationship with Role Stress: A Study among Police Personnel”** submitted to the Faculty of Management Studies and Research, Aligarh Muslim University, Aligarh for the award of the degree of **Doctor of Philosophy in Business Administration** is a record of original work done by me under the supervision and guidance of **Prof. Parvaiz Talib**, Department of Business Administration, Faculty of Management Studies & Research, Aligarh Muslim University, Aligarh and it has not previously formed the basis for the award of any Degree/ Diploma / Associateship / Fellowship or similar title to any candidate of any university in India or abroad.

Date: 02-04-2013

  
BUSHARA BANO

Place: Aligarh



## CERTIFICATE

This is to certify that the thesis titled **“Personality Types and its Relationship with Role Stress: A Study among Police Personnel”** submitted for the award of the degree of **Doctor of Philosophy in Business Administration** is a record of original work done by **Ms. Bushara Bano** during the period of her study in the Department of Business Administration, Faculty of Management Studies and Research, Aligarh Muslim University, Aligarh under my supervision and guidance.

This thesis has not formed the basis for the award of any degree, diploma, associateship, fellowship or other similar title to any candidate of any university.

Date: 5/4/2013

Place: Aligarh

A handwritten signature in black ink, appearing to read 'Parvaiz', is written over the printed name and title.  
Prof. Parvaiz Talib  
(Supervisor)

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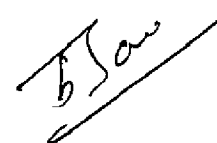
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### Glossary of Terms

Terms	Explanations
<i>Antpala</i>	Military officer during <i>Mauryan</i> period
<i>Antervansika</i>	A lady police officer during reign of <i>Mauryas</i> , whose function was to maintain vigilance on the ladies of the Royal household
<i>Arthashastra</i>	The <i>Arthashastra</i> is an ancient Indian treatise on statecraft, economic policy and military strategy.
<i>Atavikas</i>	They are forest tribes during <i>Maurya</i> period who performed as very good police soldiers particularly for operation in the forest area
<i>Atharva Veda</i>	A sacred text of Hinduism and one of the four <i>Vedas</i> , often called the <i>fourth Veda</i> .
<i>Chauro</i>	Police officers during <i>Gupta</i> period
<i>Dandapala</i>	Police officers during <i>Mauryan</i> period
<i>Dandika</i>	Senior Police officers during <i>Gupta</i> period
<i>Dandaparika</i>	They are officers, responsible for maintaining peace and order in the country during <i>Gupta</i> period.
<i>Danvarika</i>	He is warden of police. He was responsible for keeping strict vigilance on the management of the Royal Palace during <i>Mauryans</i> .
<i>Dhanmika</i>	Junior Police officers during <i>Gupta</i> period
<i>Dukha</i>	Dukkha is a <i>Hindi</i> term commonly translated as pain, misery or suffering
<i>Durgapala</i>	Military officers but also responsible for policing functions during <i>Mauryans</i>
<i>Dushchinta</i>	undue worries or anxiety
<i>Faujdar</i>	Senior military police officer who control over the military police and carried out Sultan's orders within their respective jurisdiction during <i>Mughal</i> empire.
<i>Harappan</i>	A Bronze Age civilization located in the western region of South Asia and spread over Pakistan, northwest India, and eastern Afghanistan.
<i>Janpad</i>	District
<i>Kautilya</i>	Writer of the book <i>Arthashastra</i>
<i>Khakhi</i>	Uniform of Indian police personnel
<i>Kotwal</i>	Police officer who controls over policing functions of a city during <i>Mughal</i> period.
<i>Gupta period</i>	The Gupta Empire was an ancient Indian empire which existed from approximately 320 to 550 CE and covered

	much of the Indian Subcontinent. This period is called the <i>Golden Age</i> of India
<i>Mahamatras</i>	Highest executive officers in a province responsible for overall peace and order during the reign of <i>Ashoka</i>
<i>Mauryan</i>	The <i>Maurya</i> Empire was a geographically extensive Iron Age historical power in ancient India, ruled by the <i>Mauryan</i> dynasty from 321 to 185 BC.
<i>Mughal Period</i>	The <i>Mughal</i> Empire is an Indian empire which existed between 1526 to 1857, ruled by <i>Mughal</i> emperors
<i>Pradesikas</i>	Police officers who work under <i>Mahamatras</i> and responsible for collection of revenue and maintenance of peace, law and order as well as for administration of justice during <i>Ashoka's</i> reign
<i>Prativedakas</i>	Police officers who were responsible for collection of intelligence regarding the affairs of the state and those of the people during the reign of <i>Ashoka</i> .
<i>Rabasika or Rahasaga</i>	Officers who were in-charge of the secret and confidential matters during <i>Gupta</i> period.
<i>Rajjukas</i>	These officers were ranked next to the <i>pradesikas</i> with absolute powers in matters of rewards and punishments during reign of <i>Ashoka</i> .
<i>Rig Veda</i>	The <i>Rigveda</i> is an ancient Indian sacred collection of <i>Vedic</i> Sanskrit hymns. It was composed between 1700–1100 BC during early <i>Vedic</i> period
<i>Sultan</i>	It is an Arabic language abstract noun meaning 'strength,' 'authority,' 'rulership,' and 'dictatorship,' derived from the meaning 'authority' or 'power.' Later, it came to be used as the title of certain rulers who claimed almost full sovereignty in practical terms, without claiming the overall caliphate, or it was used to refer to a powerful governor of a province within the caliphate. The term is also adopted by <i>Mughal</i> rulers.
<i>Thanedars</i>	In charge of Police Stations during <i>Mughal</i> period
<i>Vedic</i>	The Vedic period (or Vedic age) was a period in history during which the Vedas, the oldest scriptures of Hinduism, were composed.
<i>Zamindari system</i>	<i>Zamindar</i> was the name of landlords in colonial India. The <i>Zamindari</i> system was a way of collecting taxes from peasants by these landlords.

### List of Abbreviations

Act	Activity
ACTH	<i>adrenocorticotrophic</i> hormone
AGFI	Adjusted goodness of fit
Agg-Host	Aggression-Hostility
ANOVA	Analysis of Variance
ANS	Autonomic nervous system
AP	Armed Police
BPR&D	Bureau of Police Research and Development
CFA	Confirmatory Factor Analysis
CFI	Comparative fit index
CHRI	Commonwealth Human Rights Initiative
CP	Civil Police
CPOs	Central Police Organizations
CRH	<i>corticotrophin</i> releasing hormone
DGP	Director General of Police
EAP	Employee Assistance Programs
EFA	Exploratory Factor Analysis
Ep	<i>epinephrine</i>
FFM	Five Factor Model
GAS	General Adaptation Syndrome
GFI	Goodness of fit
IG	Inspector General of Police
ImpSS	Impulsive Sensation Seeking
IPA	Indian Police Act
IPS	Indian Police Services
IRD	Inter Role Distance
KMO	Kaiser-Meyer-Olkin test statistic
MIs	Model Fit Indices
N-Anx	Neuroticism-Anxiety

NCRB	National Crime Records Bureau
NEO-PI	NEO- Personality Inventory
Nep	<i>Norepinephrine</i>
NIOSH	National Institute for Occupational Safety and Health, USA
NNFI	Non-normed fit index
ORS	Organizational Role Stress
PI	Personal Inadequacy
PTSD	Posttraumatic Stress Disorder
RA	Role Ambiguity
RE	Role Erosion
REC	Role Expectation Conflict
RI	Role Isolation
RIn	Resource Inadequacy
RMSEA	Root mean square error of approximation
RO	Role Overload
RS	Role Stagnations
SD	Standard Deviation
SEM	Structural Equation Modeling
SMIs	Stress Management Interventions
SP	Superintendent of Police
SRD	Self Role Distance
STL	Stress Tolerance Limit
Sy	Sociability
ZKPQ-50- CC	Zuckerman Kuhlman Personality Questionnaire- Cross Cultural shorter version
16PF	16 Personality Factors Test

# *Chapter – 1*

## *Introduction*

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## **Chapter 1: Introduction**

The chapter introduces the variables of the study. The chapter explains the context, concepts, causes and consequences of stress. It is followed by an overview of organizational role stress. The chapter then focuses on personality. The chapter ends with a brief introduction of problem of stress among police personnel.

### **1.1 The Context of Stress**

The word “stress” is one of the most frequently used words today (Treven & Potocan, 2005). Although the term was first used in biological context by Hans Selye, a Canadian endocrinologist in 1936 (Hageman, 1982), it is now an oft used word in a general sense as well. Stress refers to irritations that disturb the individual balance (Plozza & Pozzi, 1994). It may be a complex pattern of emotional states, psychological reactions and related thoughts in response to external demands (Greenberg & Baron, 2000). Individuals use it as a basic explanatory mechanism to describe what they see as improper with work, family life, and society. It is also the cause of marital discard, mental illness, disease and lesser productivity (Hobfoll, 2004).

In today’s competitive era and fast pace of development, the impact of Stress has increased manifold. Its adverse effects, in varying degree, are experienced by everyone now. Stress is the cause of many accidents, diseases, early deaths, suicides, dissatisfactions and tensions (Schmidt, 2001). Due to stress, humankind loses 100 million working days every year. Almost 50 to 75 percent of today’s diseases are related to stress (Treven & Potocan, 2005). It is estimated that job stress cost U.S. businesses up to \$150 billion (Spielberger et al., 2003). Another estimate shows that stress costs US business a sum of \$300 billion annually (Business News Daily, 2012). Although, studies quoted above indicate that there have been attempts to measure cost of stress in the quantitative terms, it is not possible to calculate all the losses it causes to economy, society and the individuals (Schmidt, 2001).

Twentieth century is the age of science and technology with the excitement of new discoveries tempered by the ever increasing pace of life (Doublet, 2000). Twentieth century is aptly described as an age of anxiety and century of stress. In

this century, world has witnessed tremendous change in the nature of society and work place. People are expected to cope with rapidly changing technology as well as nature. They face stressors both on the job and off the job. These stressors are increasingly becoming intensive. Modern man is stressed by his/ her needs and desires, uncertainty of future, marital disharmony, lack of support from relatives and friends. While working in an organization, the individual is stressed by intense competition, strict time lines, workload and work pressures, poor relations with seniors & colleagues and poorly designed jobs. These work and non-work stressors have become a major source of his or her psychological and/or physical illness. The manifestations of such stressors are headache, insomnia, cardiovascular diseases, skin diseases, allergies, gastrointestinal and respiratory diseases. The work related symptoms of stress may be tension, anxiety, irritation, job dissatisfaction and boredom. The severe ailments due to prolonged stress may lead to permanent psychological and physical disorders (Khan, 2007).

#### **1.1.1 Stress: The Concept**

Stress is the word which is derived from a *latin* word *stringere* (Edworthy, 2000). It means to draw tight. The term stress was earlier used to denote a stimulus and response to that stimulus, in the form of adversity and affliction (Keefe, 1988). The term was used in the seventeenth century to refer to hardship, strain, adversity or affliction. Stress is an integral part of life. It refers to those circumstances that place physical or psychological demands on an individual and to the emotional reactions experiences in these situations (Hazards, 1994). In the late eighteenth century, stress was used to denote *force, pressure, strain or long effort*, referring primarily to an individual or to an individual's organs or mental powers (Hinkle, 1973).

The modern concept of stress was first introduced by Hans Selye in the year 1936 to the literature of life science. It is difficult to offer a general definition to the term 'stress' as it carries different meanings to scholars of different disciplines. In biological literature, it is used in relation to single organisms, populations of organism and ecosystems. The biologists refer to things such as heat, cold and inadequate food supply as being source of stress. The human biologists add the microbial infection and intake of toxic substance to these sources of stress. Social

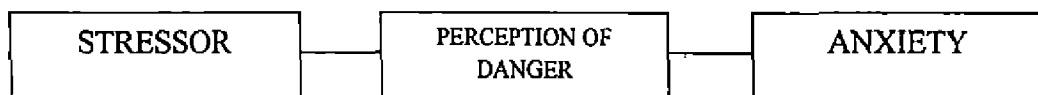


scientists argue that individual's interaction with his/her environment and resulting emotional disturbances are the sources of *stress* (Hinkle, 1987). Stress is a unique, subjective and individual experience. What one person may regard stressful, another person may regard the same event as a challenge. The focus of understanding shifts from discipline to discipline as well. Although stress as a concept, is familiar to both layman and professional alike. It is understood by all, when used in general context. But it is understood by very few when more precise account is required and this seems to be the central problem (Cox, 1985). Due to this, no single definition of the concept has been found comprehensive enough in all contexts and disciplines.

The concept of stress has three major viewpoints, namely, *biological*, *psycho-biological* and *psychological*. In *biological* context, stress is a dynamic condition in which an individual is confronted with an opportunity, constraints, or demands related to what he or she desires and for which the outcome is perceived to be uncertain but important (Selye, 1936, 1956). It is the state of an organism where the individual perceives that his well being (or integrity) is endangered and that he must drive all his energies to its protection (Cofer & Appley, 1964). It is a part of an adaptive biological system, where a state is created when a central processor registers an informational discrepancy (Levine & Ursin, 1991).

In *psycho-biological* context, the process of stress consists of three major stages. This process is initiated by a situation or stimulus that is potentially harmful in nature. If the stressor is interpreted as dangerous or threatening, an anxiety reaction will be extracted (Figure 1.1).

**Figure 1.1: Psycho-biological Context of Stress**



Source: *Spielberger (1979)*

The concept of stress has evolved in the *psychological* field. Stress is a (perceived) substantial imbalance between demand and response capability, under conditions where inability to meet demand has important consequences (McGrath, 1970). Stress may arise because of the frustration, conflict or pressure (Coleman,

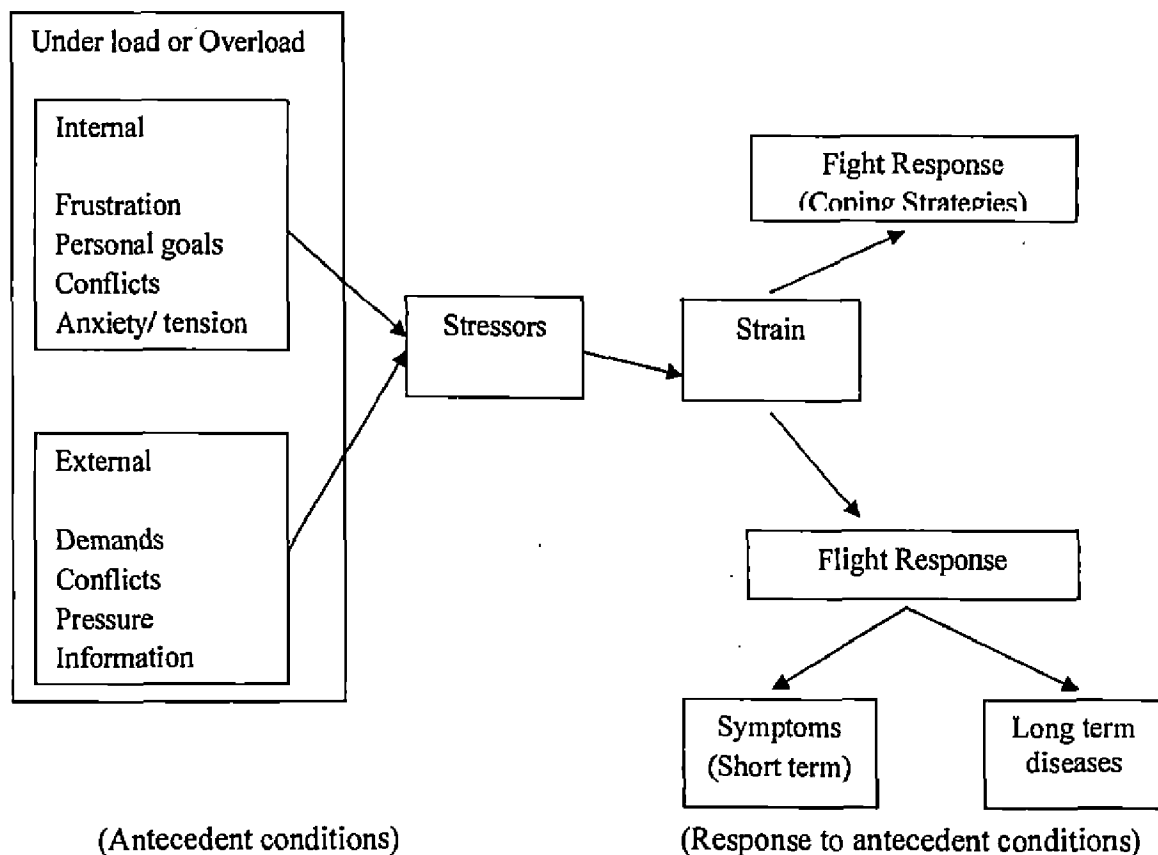
1973). Frustration occurs when the ability to achieve a desired goal is delayed or blocked. Conflict occurs not from a single hurdle but when a choice is made between two or more priorities. Pressure involves demands that force us to speed up our efforts and this stem from our aspirations, standards and values. Stress occurs when there are demands on the person, which taxes or exceeds his adjustive resources (Lazarus, 1976). Again, this transactional pattern describes stress as a relationship between the person and the environment that is appraised by the person and taxing or exceeding his/her resources and endangering his/her well being (Lazarus & Folkman, 1984).

Stress is a psychological response state of negative effect, characterized by a persistent and high level of experienced anxiety or tension (Finemann, 1979). Stress and Strain are same in non-scientific nature. The key difference between *stress* and *strain* is that strain is used only at response stage while stress may be used at any stage of stress (Agarwala et al., 1979). Scientifically, stress is the overall transaction process while the strains are individual's psychological, physical and behavioral responses to stress and the outcomes. Stressors may be the events and properties of events (stimulus) that are encountered by the individuals. The consequences of strain can be found both on individual and organizational level (Beehr & Fenlason, 1988).

Stress is an under load or overload of matter, energy or information input to, or output from, a living system. It shows that stress occurs not only due to overload of demands but also due to under load of it (Steinberg & Ritzmann, 1990). Stress can be any factor, acting internally or externally, that makes it difficult to adapt and that induces increased effort on the part of the person to maintain a state of equilibrium both internally and externally (Humphrey, 1992). Stress may be noted as the cost by a multitude of demands (Stressors) such an inadequate fit between what we need and what we are capable of, and what our environment offers to us and what it demands of us (Levi, 1996). Stress is a body's automatic response to any physical or mental demand placed upon it. When pressures are threatening, the body rushes to supply protection by turning on 'the juices' and preparing to defend itself. It's the *flight* or *fight* response in action (Bowman, 1998).

In distillation, a new conceptual model of stress can be developed on the basis of literature review (Figure 1.2). Stress may occur due to under-load and overload of matter, energy and information of internal and external environment. Internal environment may include frustration, personal goals, conflicts, and anxiety or tension of the individual. External stressors may consist of demands, conflicts, pressure and information from the surroundings of the individual. These antecedent conditions may create stress within the individual. The response of these antecedent conditions can arise in terms of strain. The individual tries to defend himself by fight or flight response. By fight response, an individual tries to use various coping strategies to reduce or overcome the ill effects of strain. But, if the individual doesn't use any coping strategy or use any inadequate coping strategy or the stressors are very severe in nature, flight response may occur. It can create physical and psychological disorders. These disorders can last for short time in the form of acute symptoms or can cause long term diseases.

**Figure 1.2: Stress-Strain Model**



Source: *Researcher's distillation*

### 1.1.2 Stress: Indian View

In the Indian context, there are a number of concepts developed by ancient Indian scholars, which relate or appear to relate to the phenomenon of stress. The modern view of stress is slightly different from the traditional view as given in *Carak Samhita*, *Patanjali's Yogasutra* and *Bhagwat Gita*. Yet, some concepts developed by ancient Indian scholars can be related to the contemporary view of stress. Some examples are *Dukha* (pain, misery or suffering), *klesha* (affliction), *kama* and *trishna* (desire), *atman* and *ahamkar* (Self and ego), *adhi* (mental aberrations) and *prajnaparadha* (failure or lapse of consciousness) (Pestonjee, 1999).

The *samakhya-yoga* says that the fundamental non-cognition, which leads to phenomenological stress, is *avidya* (ignorance). Avidya leads to *asmita* (self-appraisal), namely, those concerning the self. The object and the threat are used for reality testing. The faulty evaluation produces stress and torment. The *samakhya* system contends that the feeling of *dukha* or stress is experienced by the individual in the course of his/her interaction with the world around him or her. In this system, researchers find three types of stresses: personal (*adhyatmik*), situational (*adhibodhik*) and environment (*adhedevik*) (Rao, 1983).

Romas & Sharma (1995) have identified four levels of stressors in ancient Indian concept, namely, *Prosupta*, *Tonu*, *Vichmica* and *Udara*. *Prosupta (Dormant Stressors)* is any mental process which is potentially as stressful as any seed that has the potential to develop into a sapling. *Tonu (Tenuous or Weak Stressors)* are the stressors of insufficient strength and urge, which are kept under check of more powerful stressors. *Vichmica (Intercepted Stressors)* are alternate between stages of dormancy and manifestation while *Udara (Operative Stressors)* are found during a course of action as a permanent behavior.

It is clear that due attention has been paid to the problems of stress in Indian thoughts. The system is analytical in nature and helps an individual understand his own stresses and more specially the roots of these stressors (Sreelatha, 1991). The concept and application of ancient Indian concept of stress is suitable to Indian environment. Indian people still have belief in traditional Indian cultural values. Thus, there is utility of traditional Indian concepts and coping strategies to reduce stress even in the present age of advancements (Quadir, 2005).

### 1.1.3 Stress: Approaches

There are four major approaches to define stress namely, *physiological, stimulus based/engineering, psychological/interactional* and *transactional*. These approaches are briefly discussed below:

#### 1.1.3.1 Physiological Approach

Walter Cannon and Hans Selye, both physiologists, are pioneers credited with originating research on the body's response to stressors. Emotional stimuli were capable of releasing a substance which would prepare the animal for flight or for defense (Cannon, 1939).

When the brain perceives that a given situation is going to be stressful, it sends alarm message by nerves and hormones to prepare the body for *fight* or *flight* response. This message travels quickly and directly to specific parts of the body. On the other hand, those which are sent by chemical messengers (hormones), such as *epinephrine*, travel much more slowly through the blood-stream to organ systems and that message is much more long-lasting (Bryce, 2001). *Norepinephrine (NEp)* is the main neurotransmitter in the brain responsible for the heightened arousal that follows exposure to a stressor. NEp acts by stimulating the *sympathetic branch of the autonomic nervous system (ANS)*. This includes stimulation of the *adrenal medulla* with the consequent secretion of *epinephrine (Ep)* and *norepinephrine (NEp)* into the bloodstream. Most cells in the body have *adrenergic receptors* on which these two substances act. Stimulation of this system results in increased heart rate, blood pressure, perspiration, muscles tone and cell metabolism (Bryce, 2001).

Stressful situations also stimulate various areas of the *hypothalamus*, including the *paraventricular nucleus*. Stimulation of this nucleus results in the secretion of *corticotrophin releasing hormone (CRH)*. CRH in turn stimulates the *pituitary gland* to secrete *adrenocorticotrophic hormone (ACTH)* which circulates in the blood-stream and stimulates the *adrenal cortex* to secrete cortisol. *Cortisol* is a *glucocorticoid*. Almost every cell in the body has *glucocorticoid receptors*. Stimulation of this system results in increased glucose availability, increased blood flow and increased behavioral responsiveness in the face of stressful situations. Although the short-term effects of glucocorticoids are essential for

adhering to deadlines and personal achievement as well as organizational goals fulfillment, the long-term effects are harmful. These effects can damage muscle tissue, increased blood pressure and diabetes mellitus. In addition, excess cortisol inhibits sedition responses and the activity of macrophages, which are normally released into the bloodstream by the thymus gland to kill invading bacteria. A weakened immune system in turn makes us more vulnerable to infection and other serious ailments.

When a body copes with stress, a typical response pattern is observable, which Selye (1936) has termed as *General Adaptation Syndrome (GAS)* (Bryce, 2001). It was discovered that the body's stress response consists of a predictable, non-specific, three-stage pattern of physiological responses: the *alarm stage*, the *adaptive or resistance stage* and *exhaustion stage* (Bryce, 2001).

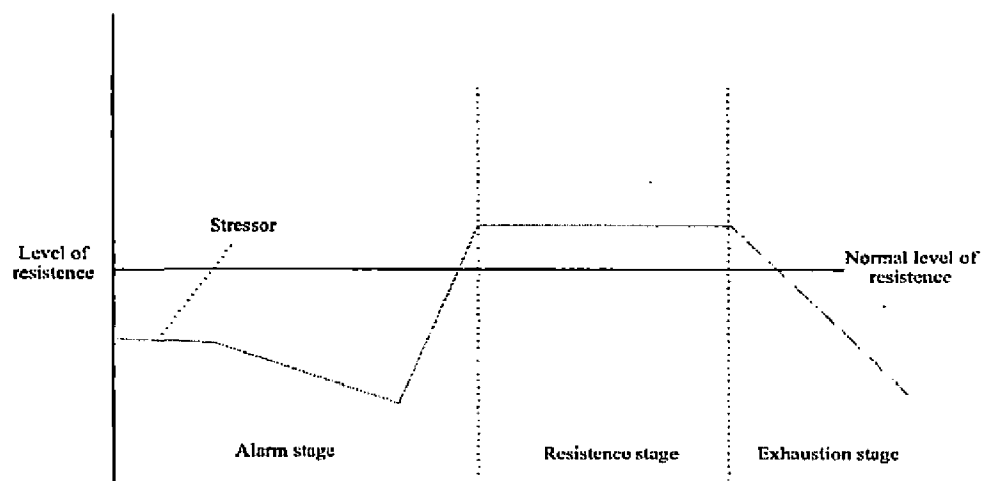
The *Alarm Stage* is a fight or flight response that prepares a person to meet the challenge or threat. At times, the person experiences anxiety, panic, fear, racing thoughts, increased heart rate, increased blood pressure, headaches, muscle tension and gastrointestinal distress. The alarm reaction stage is not the entire process for stress because no organism can remain continuously in this state, if the agent is so potent that this continued exposure becomes incompatible with life, the encountered animal dies during the alarm stage within the first hours or days. If it does not happen and if survives, alarm reaction is followed by the stage of resistance.

The *Resistance Stage* is also denoted as *Catabolic* stage. If the stress does not disappear and continues, the organism's resources are mobilized to deal with the specific stressors caused. *Cortisol*, the principle mediator of the metabolic phase, is released from the adrenal cortex. The cortisol protects the organism not only from the stressor but also from the normal defensive reaction of the organism. It is the stage during which the body may return to its pre-excited state and recovers from the psychological strains of the alarm stage once the stressor is decimated. If again the stressor persists, the individual reaches a new level of adaptation as the internal organs mount a sustained resistance. However, if the stressor persists or the defensive reaction proves ineffective, the organism deteriorates to the next stage of exhaustion.

The *Exhaustion Stage* is often termed as *burn out* phase. With its resources severely depleted, the organism is susceptible to illness, or in extreme cases, it may even lead to death (Edworthy, 2000). Warning signals of exhaustion contain feeling of hopelessness, feeling of helplessness, a desire to “cop-out”, suicidal ideation, homicidal ideation, marked impairment in social or occupational functioning (Bryce, 2001).

The General Adaptation Syndrome (Figure 1.3) had many shortcomings because Seyle’s focus was primarily medical (Pestonjee, 1992). It was noted that responses to stimuli do not always follow the same pattern. Responses, too, can be stimulus specific and dependent on the type of hormonal secretion. Another shortcoming was the issue of psychological response to stress. Although GAS model is still valid for some typical stressors, it is unable to explain psychosocial stress (Christian & Lolas, 1985). Selye also did not consider the environmental involvement in the stress process. The approach is not fit to define stress for human beings. The result was the formulation of a stimulus based approach to defining stress, which had the emphasis on identifying the events that might cause stress.

**Figure 1.3: General Adaptation Syndrome**



Source: Selye, 1956

#### **1.1.3.2 Stimulus Based Definition/ Engineering Approach**

The stimulus based definition of stress has roots in engineering and physics. The aphorism *the straw that breaks the camel's back* encapsulates the essence of stimulus-based definitions of stress. This approach is based on Hook’s law of

elasticity. It relates *stress* and *strain*. According to Hook's law; if the strain produced by given amount of stress, falls within the *elastic limit* of the material, the material returns to its original state when element of stress is removed from the material. But, if the strain passes beyond this *elastic limit* of the material, some temporary or permanent damage occurs. The process is same in case of human being. Individuals also have different level of resistances. If the level of strain falls within the tolerance limit of the individual, he/she may return to normal state when stressors are removed but if it goes beyond the tolerance limit of the individual, permanent physiological or psychological damage is likely to occur (Edworthy, 2000; Husain et al., 2006).

#### **1.1.3.3 Interactional/ Psychological Approach**

This approach is based on the interaction of the person and the environment. The interactional approach to stress incorporates both stimulus-based and response-based approaches (Cox, 1978). It focuses on interaction between the stimulus and the response. The interactional approach conditions that situational variables interact with personal variables from which strain results (Ryan, 1996). Interactional approach may be the better approach for researchers interested in studying variables (Decker & Borgen, 1993). Then, a new approach of defining stress was proposed. This theory has also been referred to as transactional theory of stress (Greenberg, 1999).

#### **1.1.3.4 The Transactional Approach**

The transactional approach incorporates the stimulus, response, cognitive appraisal of the stressor, coping style of the individual, psychological defenses, and social milieu into account (Folkman & Lazarus, 1988). It has been conceptualized that if there is no accurate fit between the person and the environment, strain will occur (French et al., 1982). Individuals *vary in their needs and abilities just as jobs vary in their incentives and demands* (French et al., 1982). This misfit can lead to disequilibrium (Edward & Cooper, 1988). This interaction between how an individual affects the environment and vice versa is a complex bi-directional process. It is a result of a variety of variables and not any single factor (Lazarus & Folkman, 1986b). The term transaction implies that stress is neither in the person nor in the environment but in the relationship between the



two (Lazarus, 1990). Stress arises when the demand of a particular encounter are appraised by the individual as about to tax or exceed the resources available, thereby threatening well being (Lazarus, 1991).

There is still considerable confusion over the actual meaning of stress, which is reflected in the variety of ways in which this term has been defined (O'Driscoll & Cooper, 1996). All the four approaches of stress define stress in their own ways but all approaches have certain shortcomings. This variety of definition is due to the application of the term in medical, engineering and social science research. However, most of the definitions have used similar terms such as misfit, mismatch, imbalance etc. to define stress. A transactional framework is integrative, because it acknowledges the importance of all the components. Stress is partially a function of the environment and it is also partially a function of the internal characteristics of the individual.

#### 1.1.4 Sources of Stress

Sources of organizational stress may fall in seven categories, namely; *factors intrinsic to job, role in organization, career development, organizational interface, organizational structure, relationship with organization and stressors due to individual differences* (personality traits, coping capability, behavioural pattern) (Cooper & Marshall, 1976). Similarly Burke (1993) classified job stressors into the following six categories, namely; *physical environment, role stressors, organizational structure & job characteristics, relationships with others, career development and work-family conflict*. The sources of organizational stress can be broadly grouped into two main categories, i.e. *job related stressors* and *individual related stressors* (Table 1.1).

**Table: 1.1 Job and Individual related stressors**

<b>Job Related Stressors</b>		
<b>Environment Specific</b>	<b>Organizational Specific</b>	<b>Job Specific</b>
Economic conditions	Changes within organization	Poor fit between abilities and skills
Increased levels of competition	Reorganizations	Work overload
Market changes	Delaying	Work place
Technological development	Lay-offs	Pressure to work longer hours
Changes in production and products	Organizational Structure	Job characteristics
Drive for greater cost-effectiveness	Organizational Culture/ climate	Conflicting job demands
Networks	Mergers/ Acquisitions and similar changes in company ownership	Unclear job expectations
Multination's	workforce diversity	Pressure of responsibility
General public concern for the environment	Reward systems/ Promotion Policy	Time pressure
		Lack of resources to perform job
		Lack of information
<b>Individual Related Stressors</b>		
<b>Individual Characteristics</b>		<b>Individual life Circumstances</b>
Personality traits		Work/life conflict
Demographic characteristics		Family problems
Coping skills, etc.		Personal problems
		Financial Difficulties etc.

Source : Compiled based on *Cooper & Marshall (1976); Chusmir & Franks (1988); Jamal (1990) in Montgomery et al. (1996); Blake et al. (1996); Montgomery et al. (1996); Schabracq & Cooper (2000); Antoniou et al. (2006)*

### **1.1.5 Nature and Consequences of Stress**

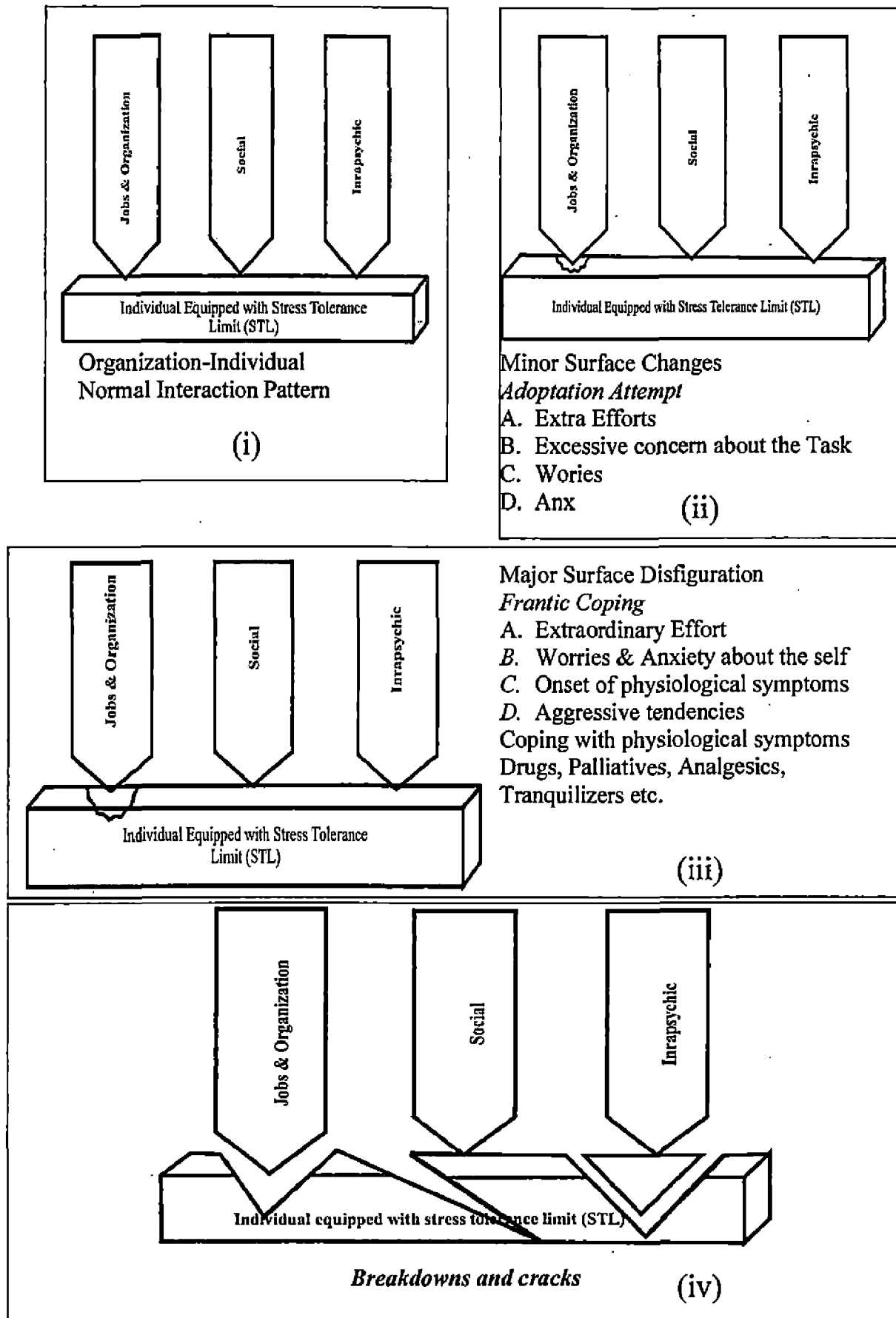
Stress originates in three important sectors of life (Pestonjee, 1992). These sectors are; *job and organizational sector*, the *social sector* and *intra-psychic sector*. *Job and organizational sector* includes the totality of the work environment (task,

atmosphere, colleagues, compensation, management, appraisal, policies, etc.). The *social sector* includes social or cultural aspects of one's life. It may include religion, caste, language, color, race and other such factors. In a country like India, social sector plays an important role of stress due to pressure of different religions, castes, languages, colors and races. The *intra-psychic sector* includes things that are intimate and personal to individual like temperament, values, abilities, traits, types, morals, abilities and health. Stress may originate in any of these sectors or in an area that falls in between them.

Every individual needs a moderate degree of stress to be alert and capable of functioning effectively in the organization. There is a view that certain level of stress is essential for being a creative manager (Pestonjee, 1987; Matthew, 1985). Stress is definitively harmful when it crosses the desired level but the desired level might differ from person to person. *Eustress* refers to stress that is good and necessary for an individual for achieving apex performance and managing minor crises. However, this has every chance of turning into distress. *Distress* indicates stress that is harmful. It is distress, not eustress, which is the cause of concern for individuals and organizations.

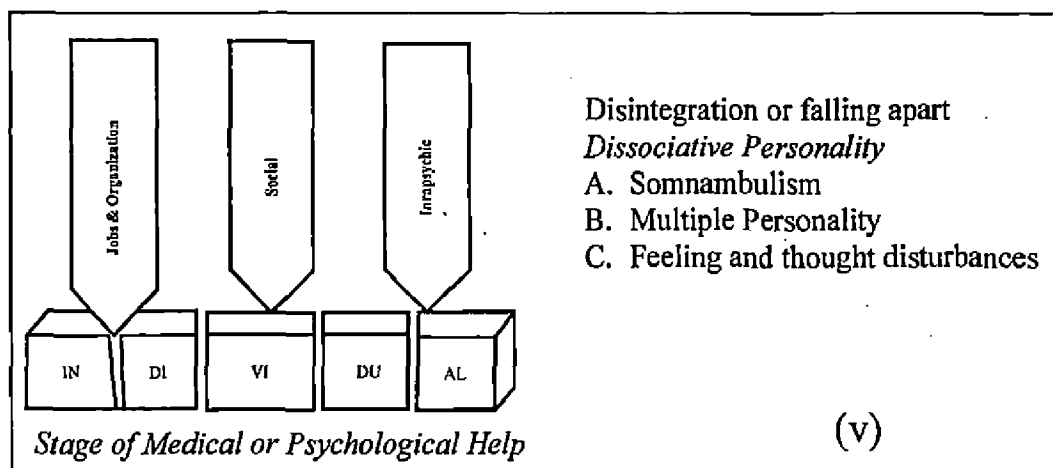
Pestonjee's (1983) diagrammatic representation (Figure 1.4) is useful to understand the process of stress. These diagrammes show the stages that a person may undergo in experiencing various stressors. In the *first stage* of encounter, the stress experienced from the three sectors of life is well within the stress tolerance limit of the person. In the *second stage*, if the stress increases in one or more sector, it causes a minor dent. But if the effective coping or management strategy is adopted, the stress is manageable up to this stage. However, in the *third stage*, stressors or loads become unmanageable leading to the negative consequences in the form of emergence of stress related diseases. If it is unchecked, the person may slip into the *last and intense phase* of complete disintegration of personality.

**Figure 1.4: Stress Process**



### Failure in Coping

Work Related Symptoms	Physiological Symptoms
Lack of Concentrations	Headaches/ Migraine
Affected Clarity of Thinking & Decision Making	Insomnia
Frequent Absenteeism	Lack of Appetite
Affected team work	Digestive disorders
Aggressive behavior	Coronary Heart Disorders
	Sexual Disorders
	Temperamental changes



Source: Pestonjee, 1983

#### 1.1.5.1 At Individual Level

The consequences of the distress can be physical or psychological or both (Greve, 2002). The short term effects of the stress are job dissatisfaction, change in behavior, raised blood pressure, depressed mood, irritability and chest pains (Melhuish, 1978). Stress often leads to health problems like depression and psychosomatic disorders in individuals (Hoel et al., 2001). But, if the acute stress is not managed successfully and increases over a long period of time, it can lead to long-term diseases, such as, coronary heart diseases and mental illness (Cooper & Marshall, 1976). In 10 to 18% of cases, individual may go through Posttraumatic

Stress Disorder (PTSD<sup>1</sup>), (Teegen, 2002). The severe condition of stress can lead an individual at the stage of burnout<sup>2</sup>.

#### **1.1.5.2 At Organizational Level**

The ill effects of organizational stress are manifested both on the level of the productivity and the competitiveness of the enterprise (Southerland et al., 1997). The extent of the economic loss to organizations caused by these stressful situations is not easy to evaluate but a report of W.H.O. says that it can cost up to 10% of GDP of any country. In summary, the consequences of stress on organization can be classified in two categories - *organizational symptoms* and *organizational costs* (Chen et al., 2006). *Organizational symptoms* may be discontent, dissatisfaction and poor morale among the workforce, performance/productivity losses, low quality of products and services, poorer relationships with clients, suppliers, partners and regulatory authorities, losing customers, bad publicity, damage to the corporate image and reputation, missed opportunities, disruption to production, high accident and mistakes rates, high labor turnover, loss of valuable staff, increased sick-leave, permanent vacancies, premature retirement, diminished cooperation, poor internal communications, more internal conflicts, and dysfunctional workplace climate (Vokic & Bogdanic, 2007). *Organizational costs* may be costs of reduced performance/productivity (lack of added value to product and/or service), high replacement costs in connection with labor turnover (increase in recruitment, training and retraining costs), increased sick pay, and increased health-care costs (Vokic & Bogdanic, 2007). A study done on job stress has found that the average absenteeism cost in a large company is more than 3.6 million dollar per year (NIOSH, 2002). Another study shows that around 40% of job turnover in the world is due to stress (Hoel et al., 2001).

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<sup>1</sup> PTSD is defined by the simultaneous presence of symptoms belonging to three distinct groups of avoidance symptoms, intrusions and hyper-activation.

<sup>2</sup> Burnout is presumed to be a causative factor in poor quality of care, absenteeism, turnover, use of alcohol and drugs, insomnia, and family problems (Maslach, 1979; Maslach & Pines, 1977).

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1008 = 15 hr  
10000 = 150 hr

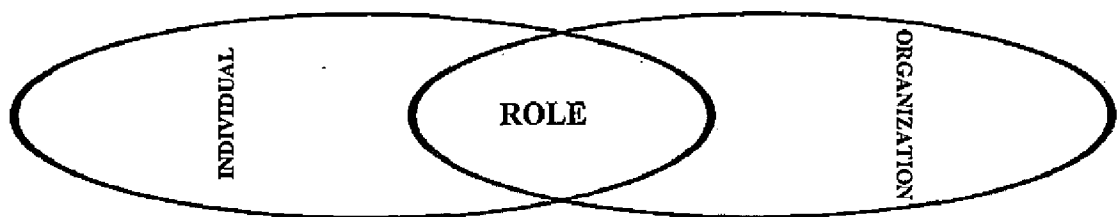
### 1.1.6 Organizational Role Stress Theory

#### 1.1.6.1 Concept of Role

For Pareek (1993), role is a set of obligations generated by the *significant others* and the individual occupying a position or office. It denotes set of functions one perform in response to the expectations of the *significant others* and one's own expectations from that position or office (Pareek, 1993). The organization and individual come together through role. Role, thus, is a link integrating the

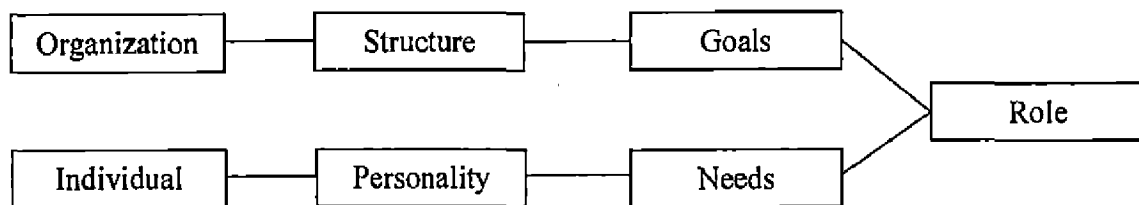
individual and organization (Figure 1.5). The organization has its structure and goals. Similarly, the individual has his personality and needs. These two interact with each other and get integrated in a role (Figure 1.6). Thus, role is an integrating point of an organization and the individual (Pareek, 1993).

**Figure 1.5: Role as an interacting region between organization and individual**



Source: Pareek, 1993

**Figure 1.6: Role as an integrating point of Individual and Organization**



Source: Pareek, 1993

An office becomes a role when it is actually determined by the expectations of other office holders. Each role has its own system, consisting of the role occupant and those who have a direct relationship with him, and thereby, certain expectations from the role. These *significant others* having expectations are role senders. They send expectations to the role. As role occupant also has expectations from his role, he too is role sender. Thus a role is not defined without the expectations of the role senders, including that of the role occupant (Pareek, 1993)



#### **1.1.6.2 Role Stress**

The term *role stress* refers to the stress experienced by a person due to his job that he plays in the system. The role stress can be defined as a state of tension and an anxiety when a person finds it difficult to perform an assigned role. The performance of the role normally satisfies the various needs of the occupants. But sometimes, it becomes a potential source of stress too for the role occupant. The problem that a role occupant faces today is that of managing the complex structure in achieving an integration of one's self with the system of the other roles as well as integration of various roles that a person might be occupying (Khan, 2007).

#### **1.1.6.3 Organizational Role Stress**

Stress is an inevitable consequence of socio-economic complexities. In organizational context, organizations are closely linked with work settings that have numerous systems such as production, finance, marketing, administration. They also have macro-organizational sub-systems like inter-organizational system, organizational goals, strategies, climates, cultures, structures, management styles and performance. These systems are accountable for the growth of the organization and its role incumbents on the one hand, and society at large on other. Very often, a person feels that he does not have any importance or lesser importance in the total organizational set up. This tends to generate feelings of *powerlessness, meaninglessness, normlessness* and consequent stress (Pestonjee, 1999).

Pareek (1983) has explained role conflicts in context of- *role space* and *role set*. He defined role space as the *role people occupy and perform*. He also defined role set as *the role system within the organization of which role is a part and by which individuals roles are defined*. He proposed the following role characteristics that fall under these two categories of role stress viz. *role space conflicts* and *role set conflicts*.

##### **1.1.6.3.1 Role Space Conflicts**

Each individual occupies and plays several roles. For instance, a person is a daughter, a wife, a mother, a teacher, a member of the club, a member of the voluntary organization and so on. All these roles constitute the role space of that person. At the center of the role space is the self. As the concept of the role is

central to that of an organization, in the same manner the concept of the self is central to the several roles of the person. The term 'Self' refers to the interpretations the person makes about the referent 'I'. A person performs various roles which are centered around the self (and from each other). These relationships define the role space. Role space is then a dynamic inter-relationship between the self and the various roles (Pareek, 1993).

- **Inter Role Distance:** Stress occurs when the linkages of organizational roles become weak. An individual learns to develop expectations of his socialization and identification with the significant others, he may perceive certain incompatibilities between the expectations of his organizational role and other role he occupies.
- **Self Role Distance:** The stress arises out of the conflict between the self concept and the expectations from the role which he may subsequently find conflicting with the self concept, he feels stressed.
- **Role Stagnation:** As the individual grows older, he/she grows in the role, he occupies in an organization. The new role demands that the individual outgrows the previous role and takes charge of the new role effectively (Pareek, 1993). Personnel working in organizations that do not have systematic strategy of man power development are likely to experience this stress when they are promoted.

#### 1.1.6.3.2 Role Set Conflicts

The individual's role in the organization is defined by the expectations of other *significant* roles, and those of the individual himself. The role set should be considered as a pattern of interrelationships between a role, and the other role. The field which is important vis-à-vis an individual's role is the role set which consists of important persons who have varying expectations from the role that he/she occupies. The conflicts arise as a result of incompatibility among these expectations by the significant others and by individual himself/herself are referred to as role set conflicts (Pareek, 1993). These conflicts take the following forms:

- **Role Ambiguity:** When the individual is not clear about the various expectations that people have from his/her work. The conflict that he/she faces

is called role ambiguity. This may happen due to lack of information available to the role occupant or due to lack of understanding of the cues available to him.

- **Role Expectation Conflict:** When there are conflicting expectations or demands by different role senders (persons having expectations from the role), the role occupant may experience this stress from his/her seniors, subordinates, peers or clients (Pareek, 1993).
- **Role Overload:** When the role occupant feels that there are too many expectations from the 'significant' others in his/her role set. He/she experiences role overload. It has two aspects-quantitative and the other qualitative.
- **Role Erosion:** A role occupant may feel that the functions, which he/she would like to perform, are being performed by some other role. The stress felt is called role erosion (Pareek, 1993). It creates a subjective feeling that some important expectations that he has from the role are shared or taken away by other roles within the role set.
- **Resource Inadequacy:** This type of stress appears when the resources required by the role occupant for performing the role effectively are not available (Pareek, 1993). These resources may be in terms of information, people, material, finance, or facilities.
- **Personal Inadequacy:** Personal inadequacy is the feeling of lack of confidence or not prepared to undertake the role effectively. Being persons who are assigned new roles without enough preparation or orientation are likely to experience this type of stress.
- **Role Isolation:** When a role occupant feels that certain roles are psychologically closer to him, while others are at much greater distance. The main criterion of distance is the frequency and ease of interaction. When linkages are strong, the role isolation will be low and in the absence of strong linkages, the role isolation will be high. The gap between the desired and the existing linkages will indicate the amount of role isolation (Pareek, 1993).

After presenting an overview of stress and organizational role stress, let us take a stock of personality and its attendant concept in the next section.

## 1.2 The Concept of Personality

The origin of the term personality is from Latin word *persona* which mean mask. The actor in ancient Greece and Rome used to wear the mask to hide their identity on the stage while taking part in drama. Personality refers to the total behavior of the individual, particularly to those relatively enduring and consistent aspects that cause us to resemble others in some ways and to be totally different and unique in others. Personality is the integration of the individual's structure, modes of behavior, interests, attitudes, capacities, abilities and aptitudes (Munn, 1965). Personality is a unique concept that emerges out of the interaction of the individual's psychophysical systems with the environment. Thus, personality is a dynamic organization within the individual of those psychophysical systems that determine his characteristic behavior and thought (Allport, 1968).

The term 'personality' has many definitions, but a common theme runs throughout most definitions, that is, *personality refers to distinctive patterns of behavior* that characterize each individual's adaptation to the situations of his or her life. The importance of personality in understanding behavior has gained prominence in recent years. Personality is considered to be determined by heredity and environmental factors and it is moderated by situational factors. It means natural and nurture factors. Although the researchers have carried out lot of work in measuring personality but nature and nurture debate is still working. Personality is also determined by influences acting upon the individual conceived and born, but it also significant to know the contribution of these personality changes on overall personality.

A frequent objection to the all personality theories is that no one possibly captures all of the variations in human personality (McAdams, 1992), and that they are too much broad. There are many theories and models to measure personality traits but no model appears to describe the whole personality of any individual. There is a need to explore the area of personality taxonomy further to develop a systematic framework for distinguishing, ordering, and naming the behavioral, emotional, and experiential characteristics of individuals.

### 1.2.1 Types Approach vs. Trait Approach

Personality type theory aims to classify individual into certain category. It refers to psychological classification of different types of individuals. Personality types are synonyms with personality styles. *Types* refer to categories which are distinct or discontinuous, whereas *Traits* refer to categories which are continuous in nature. Types are based on the qualitative differences between people, whereas traits might be constructed as quantitative differences (Bernstein et al., 2008). According to type approach of personality, introverts and extraverts are two basic categories of individuals. On the other hand, according to trait approach of personality, introversion and extraversion are part of a continuous dimension, with many people in the middle.

The trait approach represents a paradigm shift away from the type approach of personality. The shift began to take place in the 1920s and 1930s when the personality researches had been started in clinical settings and psychological laboratories (Carducci, 2009). The change has taken place because there are some shortcomings in type theory. The term *type* has not been used consistently in psychology. One of the major drawbacks of the type theory is that personality test scores usually fall on a bell curve rather than in distinct categories (Bess & Harvey, 2001). Some psychometric researches had compared *trait* approach and *type* approach and found that *trait* approach is more suitable in measuring the personality of the individual and other related psychometric dimensions. It was found that NEO-PI, a *trait* instrument was a better predictor of personality disorders in comparison to MBTI, a type instrument (Furnham & Crump, 2005). Because of these problems, researchers are now using *trait* approach in place of *type* approach of personality. It is also believed that it is near to impossible to explain the diversity of human personality with a small number of discrete types. It is described later that personality traits are subset of personality types. For the same purpose, this study has given special emphasis on the *trait approach of personality*.

### 1.2.2 Personality Traits: The Context

Celebrated polymath Goethe noted that *Behavior is a mirror in which everyone shows his image*. The statement captures an important element of personality,

which is known as trait approach of personality (Ajzen, 2005). Traits are the dimensions of the personality that influence in a particular way a person's thoughts, feelings and behaviors (Costa & McCrae, 2006). In addition to it, these traits are also assumed to be a contributing factor to the consistency in the expression of such thoughts, feelings, and behaviors across situations and over time (McAdams & Pals, 2006).

The first well-known theory of personality was given by *Sigmund Freud*. The theory was based on the concept of sexual urges (Freud, 1912; Mroczek & Little, 2006). After Freud's theory, various theories of personality were proposed by the different psychologists, including Sullivan, Horney, Jung, Bandura, Murray, Allport and Cattell (Mroczek & Little, 2006). Besides these well-known theories, various views of personality also exist. After examining the diverse classifications of personality theories, McAdams (1995) conceptualized personality as consisting of three levels, namely; *dispositional traits*, *personal concerns* and *life narratives* (Taylor, 2004). Dispositional traits are broad and nonconditional constructs, which describe personality in terms of dispositions. Personal constructs are related with life-tasks, coping strategies, motivations and development constructs related to specific location and role. The third and final level, the life narrative, includes the frameworks and constructs that give an identity to the individual (McAdams, 1995; Taylor, 2004). On the basis of classification done by McAdams, the trait approach is related to the first level of dispositional traits (Taylor, 2004). Traits refer to the observable behaviors in an individual that are often used to describe a person (Pervin & John, 2001).

### **1.2.3 Personality Traits: Basic Assumptions**

Although there are various trait viewpoints, they all tend to be guided by certain basic assumptions (Wiggins, 1997). There are three basic beliefs associated with characteristics features of traits, namely; *consistency*, *uniqueness* and *degree of likableness*.

First, principal assumption of the trait viewpoint is that behavior is influenced across a variety of situations in a manner *consistent* with the traits possessed by the individual (Fleeson, 2001; Johnson, 1997). Consistency means a person can be expected to behave in approximately the same way in similar situations (Hurlock,

1976). Second, principal assumption of the trait approach is individual differences or expression of *Uniqueness*. It is assumed that individual differs in the degree to which they possess certain traits (Costa & McCrae, 2006; Pervin, 2002). Uniqueness does not mean that a person has certain traits that are peculiarly his. It means that he has his own individual quantity of a particular kind of behavior (Woodworth & Marquis, 1947). Third, principal assumption of the trait theory is *likableness*. Some traits, such as, honesty, generosity, trustworthiness, are liked by others, while some traits, such as, rudeness, cruelty, egocentrism are disliked by others. These attribute towards traits result from social learning in a particular cultural setting and are most universal within a culture (Hurlock, 1976). In the case of police personnel, society likes the police personnel who are honest, hard-working while society dislikes the police personnel who are corrupt and dishonest.

#### **1.2.4 Trait Approach: Different Perspectives**

Theories explaining trait approach of personality were proposed by Gordon W. Allport, Raymond B. Cattell, and Hans J. Eysenck.

##### **1.2.4.1 Gordon Allport: Personalistic Viewpoint**

Allport's theory of personality is personalistic in nature (Carducci, 2009). As per this approach, *Personality is the dynamic organization within the individual of those psychophysical systems that determine his characteristic behavior and thought* (Allport, 1961). The definition reflects a belief in internal structures (traits) and neuropsychic structures (personal dispositions), which together developed human behavior (Allport, 1966). Traits are actually the core concept of personality, and as they are core, they exist in the nervous system of the individual (Allport, 1966).

Whereas personal dispositions were used to distinguish the unique variation among individuals, Allport used the term *cardinal*, *central* and *secondary* traits to describe the variations (Cohler, 1993). *Cardinal traits* were argued to be pervasive and all encompassing. These traits represent the most significant and dominant features of individual personality, expressing themselves virtually all aspects of behavior (Carducci, 2009). These traits are not possessed by all the individuals. Allport defined *Central traits* as *outstanding characteristics of the individual* (Allport, 1937). The personality of most individuals is described by a

set of central traits (Carducci, 2009). These traits are less pervasive and dominant than cardinal traits, but it still have highly characteristic of individual personality. Central traits express the situation specific aspect of personality (Pervin & John, 2001). *Secondary Traits* are the personal dispositions having a much more limited influence on the individual's behavior (Carducci, 2009).

#### **1.2.4.2 Raymond B. Cattell: Structural Trait Viewpoint**

According to Cattell, uniqueness of personality of each individual is due to two categories of traits, namely, *surface traits* and *source traits* (Wiggins, 2003).

*Surface traits* refer to those behaviors that, when empirically measured and inter-correlated, tend to cluster together. These traits are the most visible evidence of a trait (Carducci, 2009). Surface traits are controlled by underlying source traits.

*Source traits* form a unitary dimension and are the fundamental aspects of personality (Morgan, 2008). These traits are responsible for the individual difference among the personality of the different individuals (Carducci, 2009).

Cattell's structural trait viewpoint has two major *strengths*. First strength was that it was a quantitative approach to study the personality. Second strength was the theory was basically scientific in nature. This was also the major *limitations* of the theory. The theory was too much technical in nature and that was not reader friendly, while filling up the questionnaire. Secondly, Cattell has been criticized for his attempt to define a universal set of source traits that seem lose sight of the individual (Carducci, 2009).

#### **1.2.4.3 Hans J. Eysenck: Hierarchical Trait Viewpoint**

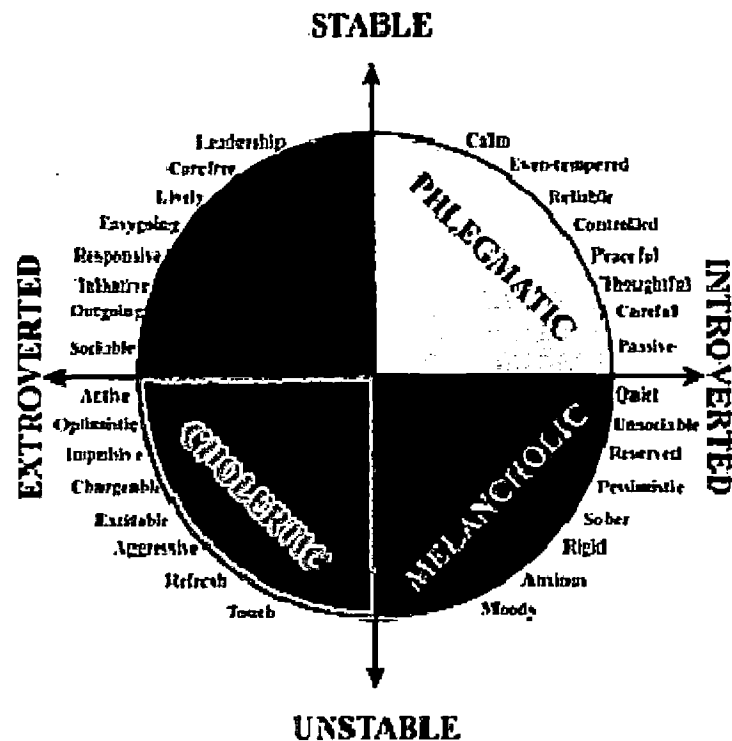
Eysenck argued that "*experiment without theory is blind; theory without explanation is lame*" (Eysenck, 1960). Eysenck began with the fundamental idea that personality has two major dimensions (Brand, 1997). The two major dimensions of the personality were described as *Introversion-Extroversion* and *Stability-Instability* (Eysenck & Rachman, 1965, Figure 1.7), which Eysenck termed as super traits. A further supertrait identified by Eysenck (1982) is *psychoticism*.

Traits are hierarchical in nature, started from specific actions to general types. Eysenck's view on the basic structure of personality can be illustrated from Figure

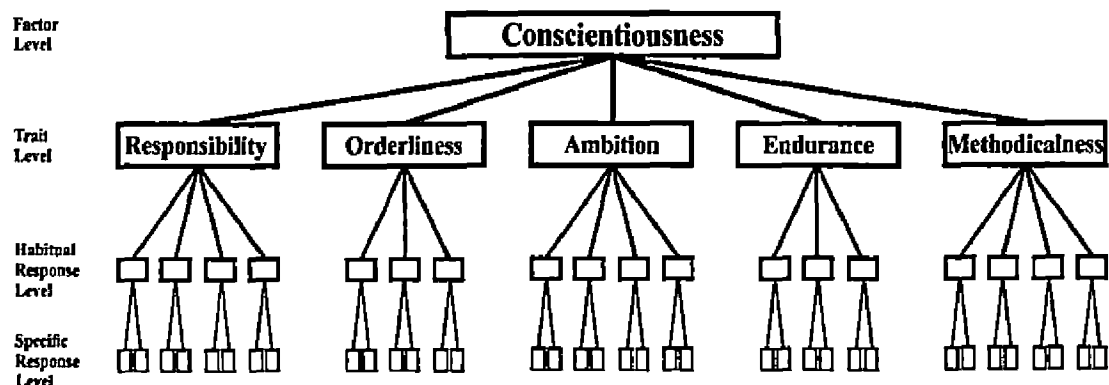


1.8. Eysenck argued for four hierarchy levels of traits, namely, *specific response level*, *habitual response level*, *trait level*, and *type level*.

**Figure 1.7: Two Major Dimension of Personality**



**Figure 1.8: Hierarchical Nature of Traits**



Source: Eysenck & Rachman (1965)

*Specific responses* are observed in a particular situation. *Habitual response* is the repetition of the specific response across a number of situations. Traits are a collection of habitual responses. At the top level, personality types exist. A type is

the interrelationship of many traits to create a general pattern of behavior. This behavior exerts a major influence on the individual's response style (Carducci, 2009).

Eysenck proposed three basic types of personality traits - *Extraversion-Introversion* (E), *Neuroticism* (N) and *Psychoticism* (P). These dimensions can be assessed using the Eysenck Personality Questionnaire (Eysenck & Eysenck, 1994). *Extraversion-Introversion* comprises extraversion at one end of the continuum and introversion at the other end of the continuum (Eysenck & Eysenck, 1975, 1994). Extraverted people like to be around other people, optimistic, Gregarious, outgoing, sociable and adventurous. On the other end, introverts like order. They are emotionally controlled, calculating, and socially distant outside of having only few close friends (Carducci, 2009). *Neuroticism* dimension comprises emotional stability at one end of the continuum and emotional instability on the other end of the continuum (Eysenck & Eysenck, 1985). Neuroticism refers to an individual's tendency to become upset or emotional. Emotionally stable people (low in neuroticism score) are care-free, even-tempered and calm in nature while emotionally unstable people are touchy, restless, moody and anxious in nature (Carducci, 2009). *Psychoticism* dimension comprises psychoticism at one end of the continuum and superego control at the other end of the continuum (Eysenck, 1990). The superego is the sense of morality. Psychoticism is associated with the tendency to be impulsive, cold, not empathic, unconcerned about the rights and welfare of others, and antisocial. Individuals low in psychoticism score are described as warm, sensitive and concerned about others (Carducci, 2009).

There were two major *strengths* of Eysenck's approach. First, he had an emphasis on the scientific perspective of personality psychology. Second was his conceptual approach to personality psychology. His personality perspective combined the study of genetics, biological, and physiological processes, learning theory, and social and cultural factors (Carducci, 2009). Again, Eysenck, too, was *criticized* due to some shortcomings. It was pointed out that Eysenck's notion of three dimensions in personality is not good enough to capture individual differences in personality. He was also criticized to disregard results that were contrary to his

own findings and simultaneously over estimating findings in according with his nomenclature (Pervin & John, 2001).

#### **1.2.4.4 Five Factor Model: Contemporary Approach to classify Traits**

Goldberg (1981) used the term *Big 5* to the five factor model of personality. The Five Factor model (FFM) is a descriptive model used in analyzing and classifying the terms used by people to describe themselves and others (Costa & McCrae, 2006). McCrae and Costa described the model as *comprehensive taxonomy of personality traits* (1991).

McCrae and Costa (2006) labeled the five factors as *Neuroticism*, *Extroversion*, *Openness to Experience*, *Agreeableness* and *Conscientiousness* (Table 1.2). The trait of *Neuroticism* is associated with anxiety and negative affectivity. It is a tendency of an individual to experience distress (McCrae & John, 1992). The factor of Neuroticism has much consensus among the researchers of personality. The trait of *Extroversion* has fewer consensuses than trait of Neuroticism (McCrae & John, 1992). The trait is associated with sociability and the expression of positive effects. It is the trait that is relatively stable in terms of role it plays across the life course (Carducci, 2009). *Openness to experience* is rather a disputative trait among personality psychologists in terms of conceptualization (Matthew et al., 2003). In general term, the trait is associated with seeking novelty, freshness and change (Carducci, 2009). The trait *Agreeableness* reflects individual differences in concern for cooperation and social harmony (Graziano & Eisenberg, 1997). People who score high on this trait are empathetic, considerate, friendly, generous, and helpful in nature (Haslam, 2007). Individuals who score high on this trait of *Conscientiousness* are described as thorough, organized, achievement-oriented, efficient, diligent, hard working, compulsive and goal striving. If it is taken to extreme, the individual may be defined as perfectionist (Haslam, 2007).

**Table 1.2: The Big Five: Factor Labels and Characteristics Traits**

Broad Label	Characteristic Traits
E-factor: <i>Extroversion</i>	Adventurous, assertive, dominant, shy, sociable, quiet*, reserved*, retiring*
A-factor: <i>Agreeableness</i>	Cooperative, generous, sympathetic, cruel*, quarrelsome*, unfriendly*
C-factor: <i>Conscientiousness</i>	Deliberate, efficient, precise, careless*, frivolous*, irresponsible*
N-factor: <i>Neuroticism</i>	Calm, contented, stable, anxious*, self-pitying*, temperamental*
O-factor: <i>Openness</i>	Artistic, insightful, intelligent, commonplace*, narrow interests*, shallow*

Source: *John (1990)*

Note: \*these traits are negatively related to the factor.

The five factor model allows the systematic approach to personality. Various researches done by McCrae & Costa (2006) found that the model is valid across different cultures and languages. One *limitation* of the model shows that although it describes a basic unit structure, it does not explain why the structure exists. The model does also not focus on increasing the understanding of the individual (Carducci, 2009).

#### **1.2.4.5 Zuckerman Kuhlman Model of Personality**

An Alternative Five Personality Model (Zuckerman et al., 1993) was developed by comparing 46 commonly used scales based on three, four, five and six dimensions of personality questionnaires (Zuckerman et al., 1988, 1991). Both the three factor model of Eysenck and five factor model of McCrae & Costa were robust and reliable (Zuckerman, 1993). Based on these understandings and further statistical analysis of the data, a new questionnaire was developed in the personality psychology, known as *Zuckerman Kuhlman Personality Questionnaire* (ZKPQ scale). The items of ZKPQ scales were aimed to assess the five factors more clearly. The scale also excluded the items showing a strong social desirability influence (Aluja et al., 2006).

The model consists of five personality traits namely, *Impulsive Sensation Seeking*, *Aggression-Hostility*, *Activity*, *Sociability*, and *Neuroticism-Anxiety*. Furthermore, Aluja, Rossier, Garcia, Algleitner, Kuhlman & Zuckerman (2006), proposed a cross-cultural shortened form of the Zuckerman Kuhlman personality Questionnaire (ZKPQ-50-CC).

*Impulsive Sensation Seeking* items describe a lack of planning and tendency to act impulsively without thinking. The sensation seeking items describe the general need for thrills and excitement, a preference for unpredictable situations and friends and the change for need and novelty. These items of *Aggression-Hostility* describe a readiness to express verbal aggression, rude, thoughtless, or antisocial behavior, revengefulness and spitefulness. These peoples with *Neuroticism-Anxiety* have a quick temper and impatient with others. These persons describe emotional upset, tension, worry, fearfulness, obsessive indecision, lack of self-confidence and sensitivity to criticism. The *Activity* factor encompasses two groups of persons. One describes the need for general activity and impatience and restlessness when there is nothing to do. The second group indicates a preference for challenging and hard work and a lot of energy for work and other tasks. The *Sociability* factor reveals one group of items indicating a linking of big parties and interacting at parties and having many friends. The second group indicates intolerance for social isolation in extraverts and a linking for solitary activities in introverts. The alternative five factor model is most appropriate for the present study because *Activity*, *Sociability*, *Aggression-Hostility*, *Impulsive Sensation Seeking* and *Neuroticism-Anxiety* are the prominent personality traits of police personnel in India.

The study aims to understand the relationship between role stress and personality traits among police personnel of India. In the next section, the theme of present research study is presented. It is followed by rationale, problem statement and aim of study.

### **1.3 Introduction to the Research Theme**

Police is an ubiquitous organization of the society. They are the watchdog of the democracy. Therefore, police personnel are supposed to be the most visible arms of the government. The police personnel are needed in the society at the time of

any danger, crisis and difficulty because the police personnel are expected to be more accessible, interactive, responsible and dynamic organization of any society. In broad way, the primary functions of the Police are mainly to *prevent the crime* and *maintenance of law & order*. These functions are responsible for ensuring peace and public order in the country. Thus, police plays a vital role in country's development. It detects, fights, arrests and controls the enemies of peace and public order.

Police personnel are exposed to various stressors that are significantly different, in terms of quality and quantity to those experienced by the general population (Jones & Kagee, 2005). They are reported to have higher rates of substance abuse, divorce, suicide, cynicism, burnout, job dissatisfaction, heart diseases, stomach disorders, alcohol, drug use, lower morale vis-a-vis members even suicide attempts vis-à-vis members of other professions (Brown & Campbell, 1990; Gilmartin, 2002; Violanti, 1996). This is not surprising considering the inherent dangers and challenges police face in the course of their duties (Schaible & Gecas, 2010). The job profile of a police officer includes witnessing a fellow officer killed in the line of duty, killing someone in the line of duty, recovering bodies from motor vehicle accidents, witnessing domestic or community violence and responding to cases involving child abuse & neglect (Gulle et al., 1998). Stress is a byproduct of police work (Myendeki, 2008). Every year more police officers commit suicide than are murdered by felons (Kates, 2005).

As discussed earlier, role stress occurs due to role conflicts. An oft used measure to assess role stress is the *Organizational Role Stress Scale*. However, due to very limited studies examining role stress in police personnel in India, there is a need for further examination. Further, the relationship between personality and role stress has also not received enough attention. This is not unique to India. The relationship between personality and stress has generally been ignored in other context as well (Hochwalder, 2006).

As noted earlier, one of the best inventories to measure personality traits is *Zuckerman Kuhlman Personality Questionnaire- shorter cross cultural version* (ZKPQ-50-CC) developed by Aluja et al. (2006). Again, limited research has been carried out examining the personality traits of police personnel using ZKPQ-50-

CC around the world. The present study examines the role stress among Indian police personnel as well as investigates the relationship between the personality traits and role stress. This study is expected to contribute to enriched understanding regarding the stressors in police work in India and influence of personality on the stress. The major aims of the study are presented in the next section.

#### **1.4 Aims of the Study**

This study attempts to understand personality traits of police personnel and role stress amongst them. The study also aims to explore the influence and impact of personality traits on stress among police personnel. Specifically, the study is intended to:

- to investigate the nature and dynamics of stress among police personnel
- to identify specific stressors causing stress among police personnel
- to assess the personality traits among police personnel
- to explore the relationship of personality traits and role stress among police personnel

(In addition to these key objectives, the study also attempts to explore differences across various demographic variables like type of police organization, age, gender, length of service etc.)

- to propose managerial interventions to handle the stress among police personnel.

#### **1.5 Chapterisation Scheme**

In the present chapter, an attempt was made to present an overview of the key constructs of the study. In addition it explained the rationale and the approach of the study. In the next chapter, i.e. Chapter 2, a brief profile of the subject of this study, i.e. police, is presented. It enumerates the duties and responsibilities of police personnel in India. The chapter also presents the organizational structure of police in Indian States as well as Centre. The chapter ends with the discussion of stress among police personnel in India.

In Chapter 3, literature review pertaining to the subject matter of this study is presented. Literature review focuses on past and present research carried out on stress, especially on role stress. Under the theme of personality, review focuses on

the trait approach of personality, with particular emphasis on five-factor model of personality. In the end, discussion on police stress and police personality has been carried out with the help of extensive literature review across the world, laying especially emphasis on Indian studies.

Chapter 4 delineates the research strategy. It provides a description of the problem statement, objectives, hypothesis, research design and methods utilized in this research study. It includes details of the participants as well as the instruments. It also presents the hypothesized research model. For scale refinement, both the instruments were subjected to the *Exploratory* and *Confirmatory* Factor Analysis. The chapter explains the pattern of analysis followed to arrive at results. It also presents major limitations of the study.

In Chapter 5, the results of the data analysis are presented. The data analysis has been carried out through various statistical techniques such as *Independent sample t-test*, *ANOVA test*, *Correlation estimation* and *Structural Equation Modeling*. Finally, results of the hypothesis are presented.

In Chapter 6, *Conclusion*, *Managerial Implications* and *Future Research Directions* of the study are presented. The chapter begins with a summary of findings. This is followed by conclusion and the managerial implications. Implications have been divided into three groups, i.e., *implications arising out of findings with respect to personality traits*, *implications based on results of organizational role stress* and *implications emerging out of interface of personality traits and organizational role stress*. In the end, it suggests the future research directions so that this effort can be extended further.



# *Chapter – 2*

## *Police in India*

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## **Chapter 2: Police in India**

The chapter presents an overview of the context of the study i.e. policing in India. The chapter traces the historical evolution of policing in India. It also takes a stock of present status of Indian police. The chapter ends with the identification of signs of stress among Indian police.

### **2.1 Indian Police: The Context**

The term *police* has been derived from the latin word *politia* which means the condition of a *Polis* or *State*. According to Oxford dictionary, the term *police* means *a system of regulation for the preservation of order and enforcement of law; the internal government of State* (Kalia, 1995). The term broadly refers to purposeful maintenance of public order and protection of persons and property, from the hazards of public accidents and the commission of unlawful acts. It refers to civil functionaries charged with maintaining public order and safety and enforcing the law including the prevention and detection of crime (Ghosh & Rustamji, 1993).

India is multi-cultural, multi-ethnic and vast country. It is the second most populated country of the world. Maintaining law and order in world's largest democratic country is an arduous task. The police personnel provide for the security of people and enforcement of laws of the country. It determines the manner in which democratic decisions are implemented in the country. In view of the growing violence, social conflicts and serious threats of terrorist activities, the role of police is becoming even more important. The assurance of equality and dignity to the weaker sections of the society is also dependent upon the performance of the police. Clearly, police has a crucial role in the existence and development of India (Verma, 2005).

### **2.2 Police: Historical Perspective**

Modern Indian police system is a creation of British rule. But the origin of police can be traced to the earliest *vedic* period of the Indian history. *Rig Veda* and *Atharva Veda* mention certain kinds of crimes known to Vedic India. Evidence indicates existence of security forces in *Harappan* Civilisation as well. Let us take a stock of policing system in ancient, medieval and modern India.

### 2.2.1 Police: Ancient India

During Vedic period, exact references of criminal justice organization are not available (Verma, 2005). However, *Mauryan* period (C.324 BC-183BC) showed important features of criminal justice system. *Arthasastra* of *Kautilya*, written around 310 BC throws light on the state of the society and the administration, system of administering justice and also the state of crime during that period. The *Arthasastra* is a treatise on the criminal justice system. It reads like a manual for the police in modern times. According to *Arthasastra*, the smallest administrative police unit was the village. The village councils were responsible to detect and prevent crime under the supervision of the headman (Nath, 1983). *Danvarika*, the warden of police, was responsible for keeping strict vigilance on the management of the royal palace. *Antervansika*, a lady officer, was responsible to maintain vigilance on the ladies of the royal household. There were three types of police officers, namely, *Dandapala*, *Durgapala* and *Anpala*. *Atavikas* were the police soldiers particularly for operation in the forest areas (Srivastava, 1999). Overall, the Mauryan system of criminal justice was rigorous and espionage based.

During Ashoka's reign (304BC-232BC), the criminal justice system was tempered and moderated by the Buddhist philosophy, piety and non-violence. During his reign, *Mahamatras* were the highest executive officers in a province responsible for overall peace and order of the province. *Pradesikas* were under *Mahamatras*. They were responsible for collection of revenue and maintenance of peace, law and order and administration of justice. *Rajjukas* were under the *Pradesikas*. They were responsible for the welfare and happiness of the *Janpad* with absolute powers in matter of rewards and punishments. *Ayuktas* were responsible to *Rajjukas* and *Pradesikas*. They were responsible for the village. *Prativedakas* were the intelligence police. They were responsible for the intelligence regarding the affairs of the state and the police (Srivastava, 1999).

*Megasthenes*, the Greek ambassador and *Fahien*, the Chinese traveler wrote a detailed account of the administration during the Guptas Period. During Gupta period, *Dandika* were the highest ranked police officers. *Chauro*, *Dhanmika* and *Dandaparika* were other police officers under *Dandikas*. *Nagar Shreshthi* was

responsible for peace and security of the city. *Rabasika* or *Rahasaga* was incharge of the secret and confidential service (Srivastava, 1999).

The criminal justice system developed during this period continued for five to six hundred years with only one difference in Mauryan and Gupta period. The administration system during Mauryan system was centralized while it was more decentralized during the Gupta period. However, it may be noticed that basic structure of police was nearly the same. The village police, the city police and the palace police were the basic systems which was suitably developed or changed by various Kings (Srivastava, 1999).

#### **2.2.2 Police: Medieval India**

During the medieval period *Sultan* was the center of power and political activity. *Faujdar* was the head of criminal justice administration at the provincial level. As a chief executive, he was entrusted with the duty of ensuring peace and security to the whole province. *Kotwal* was the administrative owner of criminal justice system of the district. He was the magistrate, head of the police and Municipal office, rolled into one. At the village level, *Choukidar* was responsible for the prevention and detection of crimes (Srivastava, 1999).

The government under the *Mughals* was autocratic and military in nature. It did not take responsibility or devote itself to manifold functions, as a modern government generally does (Srivastava, 1999). Justice and police were two weak points of the Mughal period (Mishra & Mohanty, 1992).

#### **2.2.3 Police: Under East India Company**

The law and order situation at the close of *Mughal* Empire was characterized by anarchy and confusion (Shah, 1993). The British came to India as traders in 1612. The leading organization was the *East India Company*. Initially, the British presence was *maritime and commercial in character* (Arnold, 1986). The company officials functioned with the cooperation of local rulers. By the early nineteenth century, *Mughal* Empire started disintegrating. The native rulers emerged at various nooks and corners of the country. Infighting among the native rulers and prevalence of greed & corruption among the ruling class and several other factors paved the way for conversion of the Company administration into a full-fledged colonial state.

Till the middle of nineteenth century, there was *no satisfactory police system* (Griffiths, 1971). This was because of Britishers inexperience and lack of knowledge about the country. Policing was not taken away from the *zamindars* till 1792. East India Company sent Cornwallis to India as Governor General. He abolished *zamindari* system of maintaining law and appointed *thanedars* who were now made responsible for the maintenance of law and order. He introduced a number of reform measures. However, his reforms displayed a lack of faith in the natives of the land and their institutions.

#### **2.2.4 Police: Background to the Indian Police Act of 1861**

After the annexation of Sind (presently in Pakistan) to the British Indian Empire in 1843, Sir Charles Napier was made responsible for the administration of this crime-ridden and difficult area. He realized that only under a recognized organization, the police could function properly and produce desired results. He reorganized the native police system on the basis of a colonial model of police, namely *Royal Irish Constabulary*. His system was based on two basic principles; first, the police must be completely separated from the military, and second, they must act as an independent body, assisting Collectors in discharging the responsibilities for law and order, but under their officers (Griffiths, 1971). Napier's system provided *Inspector General of Police* who was responsible for the administration of the force throughout the territory. He was responsible for law and order for the entire territory (Bayley 1969). There were *superintendents* in each district. The system soon spread to other part of the country under the control of the East India Company. Napier regarded his force as military in form. The main principles of the model were not altered even by the Police Commission of 1860, which designed the present police force of India (Srivastava, 1999).

#### **2.2.5 Indian Police Act of 1861**

The events of 1857 necessitated an instrument to control the vast lands at an economical cost. After facing a real threat of losing power in 1857, the British rulers were determined to ensure complete suzerainty and suppression of all challenges to their power (Arnold, 1986). A Police Commission was appointed in august 1860 with the aim of making police an efficient instrument for the prevention and detection of crime. Nevertheless, an internal government memo to

the Police Commission did not mask the real objectives for the new police force. The commission was told to bear in mind that *functions of a police are either protective and repressive or detective* and that *the line which separates the protective and repressive functions of a civil force from functions purely military, may not always be very clear* (Imperial Gazetteer of India, Part IV, reprint 1909, p. 380).

The Indian police system, designed in 1860, was, therefore, sharply opposite to the British Bobby who is celebrated symbol of democratic policing throughout the world. The primary objectives were to meet the exigencies of trade and company profit. Accordingly, the emphasis was on order maintenance, on keeping the trade routes safe and ensuring that the exploitation of resources could continue unhindered. However, in addition to the objectives of controlling the vast lands and subjugating the people, there were imperialistic and racist considerations too for the British rulers (Verma, 2005). The design of the British police system was based on the structure developed by the Mughals in the seventeenth century. The new model incorporated many features of the Mughal system and officials such as *Daroga*, *Kotwal* and *Faujdar* found place in the reorganized British system (Woodruff, 1954).

The *Indian Police Act* (IPA) of 1861 imposed a uniform police system on the entire country. The Act established organized police forces the responsibility of the various provincial governments. Within the provinces the police was to be recruited, trained, disciplined and control by British officers. The Act established Indian police (IP), a superior police service. It was conceived to relieve the District Magistrate of his duties to keep check over the local police and make it more professional in nature. Thus, police force became organized, disciplined and well-supervised. The Act instituted a system of policing in India which is still in force. It may be noted that the Act brought uniformity in administration with the district police placed under the supervision and control of the District Magistrate (Srivastava, 1999).

The Police Act was implemented throughout the country. However, the general conditions of crime control remained unsatisfactory due to various reasons, prominent being the prevalence of the poverty and famines, adverse conditions

and shortage of force. The Government of India established the *Second All India Police Commission* in 1902. The Commission recommended major structural changes as appointment of new Dy. IG and Dy. SP posts, constitution of Railway Police Force, division of provinces into ranges, and constitution of armed force at district level. The recommendations were implemented but they were against Indianisation (Hooja, 1961). Despite the dissent of the Maharaja of *Darbhangra*, the only Indian member of the team, the Commission's recommendations were accepted by the Government of India (Beghum, 1996). Other important developments during this period were setting up of *Islinton Commission* (1912) and *Lee Commission* (1924). The recommendations of these commissions led to substantial Indianisation of the senior rank of the Police Force. By Islinton Commission, the meritorious Indians were accommodated at the senior levels. Later in the year 1919, 33% of IPS quota was fixed for the Indians. With Lee Commission (in 1924), the quota was raised to 50% (Beghum, 1996). The development had also been shown in the subordinate level gradually. Thus, before Independence of the country, a system had been established which the posterity could improve upon (Raghavan, 1989).

### **2.3 Present Organizational Structure of Police**

According to article 246 of the Indian Constitution and section 3 of the IPA, the police force is a state subject and not dealt with at central level. Each state government has the responsibility to draw guidelines, rules and regulations for its police force. These regulations are found in the state police manuals (Commonwealth Human Right Initiative Report, 2005). The organizational structure of police forces in India is fairly uniform in all the states throughout the country. The broad set up of police organization in a state is shown in the figure 2.1.

State police works under the overall control of State Government (CHRI, 2005). The head of the police force in a state is the *Director General of Police* (DGP). DGP is responsible to the state government for the administration of the police force in the state and for advising the government on police matters. The state is further divided into several zones, ranges and districts (Martensson, 2006). An officer of the rank of *Superintendent of Police* (SP) heads the district police force.

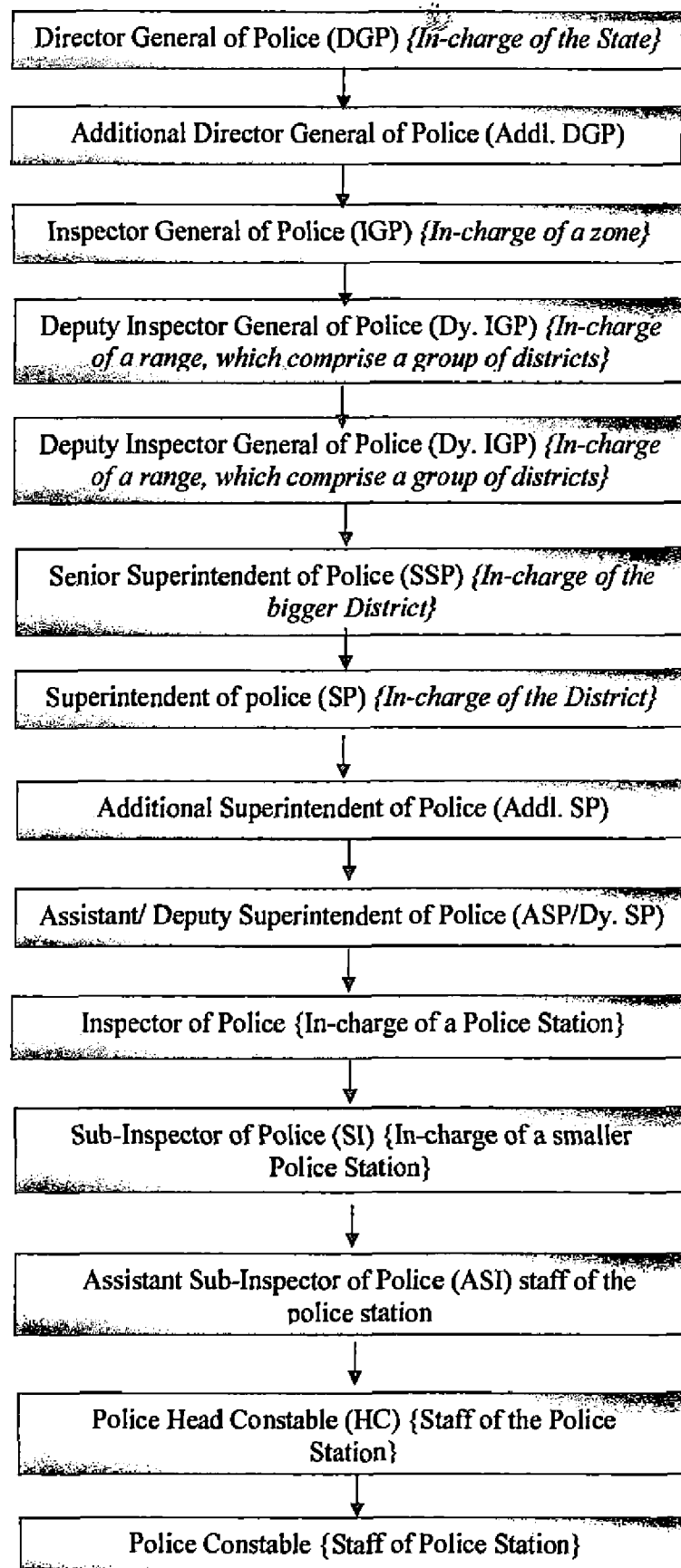


A group of districts form a range, which is looked after by an officer of the rank of *Deputy Inspector General of Police* (DIGP). DIGP guides, advises and assists the SP through regular visits and inspections. Some states have zones comprising two or more ranges. Zones are the areas which are under the charge of an officer of the rank of an *Inspector General of Police* (IGP) (CHRI, 2005).

The districts are again divided into sub-divisions, circles and police stations (Martensson, 2006). A sub-division is under the charge of an officer of the rank of Additional or Deputy Superintendent of police (ASP/ Dy. SP). Every sub-division is further divided into a number of police stations, depending on its area, population and prevalence of crime. The police station is headed by the station in charge of the rank of *Inspector/Sub-Inspector*. Each police station is further divided into a number of beats assigned for patrolling, surveillance and collection of intelligence. Police beats are under the charge of Sub Inspector. *Head Constables* and *Constables* form lower level of police hierarchy. Between the police station and the sub-division, there are police circles in some states. The head of the circle is an Inspector of Police (CHRI, 2005).

District police is divided into two major branches of police force i.e. the *armed police* and the *civil police*. The primary function of the civil force is to control crime, while the primary function of armed police is to deal with law and order situation. Armed police is the reserve police of the district. The force is kept reserved to meet any emergency situation (CHRI, 2005). Armed police and civil police supply material and officers to the other branches. Therefore, these two branches constitute the most visible part of the force (Shah, 1991). In addition to civil and armed forces there are departments like detective police, traffic police revenue police, mounted police, fire police, and technical branches like prosecution branch, radio branch and intelligence police.

**Figure: 2.1 Field establishment of Police**



Source: CHRI, 2005

Police and Public Order are state subjects, but this does not minimize the role of Central Government in Police administration. Constitution of India empowers the Central Government to intervene in some situations or perform special function in police matters. For example, Article 355 specifies that *it is the duty of the Centre to protect the states against internal disturbances and to ensure that the governance of every state is carried on in accordance with the provisions of the Constitution.*

The constitution itself enumerates a long list of subjects like All India Services, arms, ammunition, passports etc. in the union list. As per List 1 of the 7<sup>th</sup> Schedule, the Parliament of India has exclusive powers to make laws with respect to the armed forces of the Union, the Central Bureau of Intelligence and Investigation, the Union agencies and institutions for training of police officers, promotion of special studies or research, scientific and technical assistance in the investigation or detection of crime, all India Services, extension of the powers and jurisdiction of members of one state police force to another with the consent of that state or to outside railway areas (CHRI, 2005). Thus, Central government under the supervision of Ministry of Home Affairs plays an important role in formulating the policies of the police administration.

The Central Government has established a number of police organizations known as Central Police Organizations (CPOs). The CPOs can be broadly divided into two groups, namely armed police organizations or Central Para-Military Forces (CPMFs) and other central government organizations. CPMFs include Assam Rifles, Border Security Force (BSF), Central Industrial Security Force (CISF), Central Reserve Police Force (CRPF), Indo-Tibetan Border Police (ITBP) and National Security Guards (NSG). Second group of central Police Organizations include Bureau of Police Research and Development (BPR&D), Central Bureau of Investigation (CBI), Directorate of Coordination of Police Wireless (DCPW), Intelligence Bureau (IB), National Crime Records Bureau (NCRB), National Institute of Criminology and Forensic Science (NICFS), and the National Police Academy (NPA).

An important power with Central Government is the appointment of IPS (Indian Police Services) officers. Section 3 of the All India Services Act, 1951 empowers the central government, after consultation with the state governments, to make rules for the regulation of recruitment and the conditions of service of persons appointed to an all India service including IPS. The senior duty posts are called cadres and generally the cadre posts are filled with IPS officers. The central government periodically reexamines the strength and compositions of each cadre in consultation with state government and makes such alteration therein as it deems fit.

#### **2.4 Duties and Responsibilities of Police**

Section 57 and 58 of the Model Police Act, 2006 describes the roles, functions and responsibilities of Indian police personnel. The police is expected to be the most accessible, interactive and dynamic organization of any society. Its roles, functions and duties in the society are natural to be varied, such as multifarious on the one hand; and complicated, knotty and complex on the other. In a broad way, police is expected to play two roles in the society i.e. maintenance of law and maintenance of order. However, the ramifications of these two duties are numerous. In fact, *there is something a good patrolman puts into his work that is not found in the books of rules nor taught by police instructors* (Vollmer, 1933).

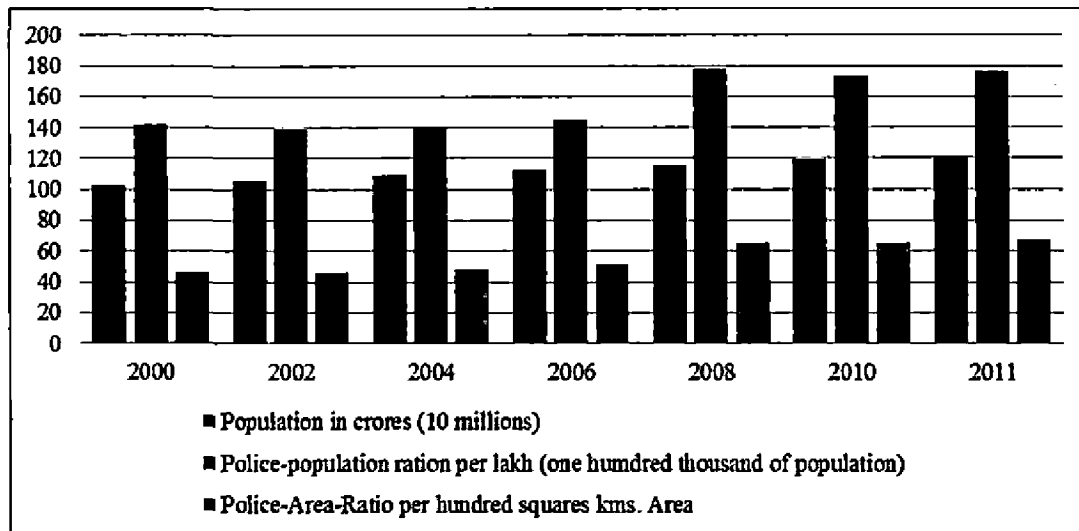
The functions of police encompass preservation of law and order, to safeguard people's life & property. The society expects the cop to play the varied roles with equal élan. He is helper, savior, friend and referee. On the other hand, as a law enforcer he arrests, encounters or uses force to enforce the rule of law. This rollercoaster ride is difficult to understand functionally and emotionally (Bratz, 1979). Policing makes huge demands on the mental, emotional and physical capabilities of the personnel. These demands are too often so stressful that they begin to destroy the individual (Depue, 1979).

#### **2.5 Police Strength**

In India, police is classified as civil police and armed police. Against a sanctioned strength of 21.24 lakh of total police force (both civil and armed), 25.42 percent deficiency (vacancy) remained in the actual force which comprised of 15.85 lakh police personnel (Bureau of Police Research & Development, 2012). During 2012

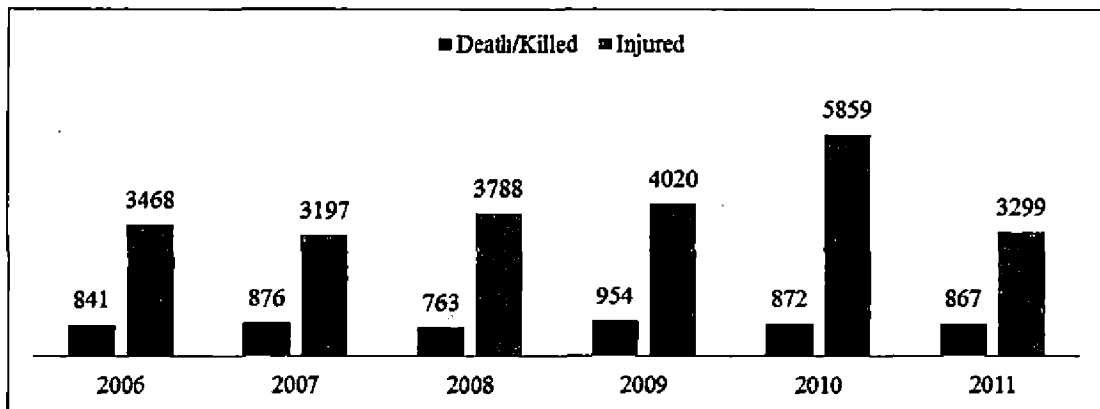
at all India level, the density of police personnel per unit area (100 sq. kms) was 50.06 and the number of police personnel per unit population (per lakh) were 131.45 (BPR&D, 2012, Figure 2.2).

**Figure 2.2: Police-population- ratio per lakh of population and per 100 sq. kms. Area**

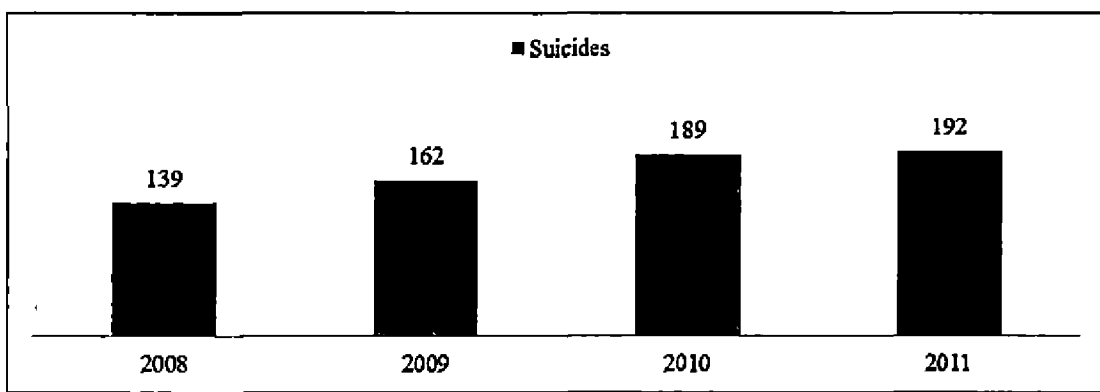


Crime statistics of 2011 reveal that a total number of 4,881 police personnel (comprising 3,822 natural deaths, 867 deaths on duty and 192 suicidal deaths) died as compared to 3,988 deaths in the year 2009 showing an increase of 8.17% over the previous year (NCRB, 2012). But casualties while on duty (867) decreased during 2011 by 1% as compared to previous year (872). On the other hand, police casualties due to suicide are increasing steadily over the years. In 2008, 139 police personnel committed suicide, 162 in 2009, 189 in 2010 while 192 suicidal deaths were reported in 2011 (NCRB, 2012). This is showing an increase in stress level of police personnel. It was reported that highest number of casualties in Punjab (110) followed by casualties in Uttar Pradesh (105). Crime statistics further reveals that a total of 3,299 police personnel of various ranks sustained injuries while performing their duties in the year 2011. The trend analysis shows that there is a continuous increase in death and injuries of police personnel over the years. Figure 2.3 and 2.4 depicts the trend of deaths/injuries and suicides respectively.

**Figure 2.3: Police personnel death/killed and injured**



**Figure 2.4: Police Suicides**



## **2.6 Stress among Indian Police Personnel**

Numerous researches on policing have been undertaken in the United States and other developed countries like Britain, Sweden, South Africa, Norway and Canada. In contrast, the body of police research in India is meager. Mostly it is in form of reports of the National Police Commissions of 1904 and 1978 (GOI 1979-83), some reports by state police commissions, symposium proceedings (Seminar 1977), memoirs by serving or retired police officers (e.g., Lobo 1992; Shah 1992; Singh 1996) and a few journalistic accounts. Overall, the literature on Indian police, especially the critical evaluation of the role is meager. The government publishes annual report, namely- *Crime in India* that provides official data on the regional distribution of crime and police resources. On the other hand, the media, especially newspapers and magazines provide journalistic accounts of police related subjects. This forms the body of knowledge for the police in India, which obviously is very limited (Verma, 2005).

Ghosh (1981) noted that Indians are all familiar with the *paan* chewing, discourteous, rude, aggressive and bully figure in *Khakhi*. But, similarly Indians are unaware about the fact that police in India is largely underpaid, understaffed, overworked, demoralized, inadequately trained and equipped and subject to political interference, feared as a persecutor rather than respected as a protector, often callous and corrupt. *The policeman is denounced by the public, criticized by the preacher, ridiculed by the movies, berated by the newspapers, and unsupported by the prosecuting officers and judges. He is shunned by the respectable. Condemned while he enforces the law and dismissed when he does not. He is supposed to possess qualifications of a soldier, doctor, lawyer, diplomat and educator with remuneration less than that of a daily laborer.* (Vollmer, 1933)

Police personnel face variety of stressors or job pressures due to their role. The job pressure for police officer include the responsibility of protecting the public, constant exposure to other people's problems, emotional distancing from others, the inactivity/crisis see-saw, maintenance of macho defenses, bipolar thinking, negative public image of police, a web of personal puzzles and ceaseless on the job catastrophes (Mathur, 1994). Crime statistics reveal that number of suicides among police personnel is increasing steadily over the years. These suicides identify that police personnel of India are experiencing high level of stress. These stressors can become a growing and progressive disease which may undermine the efficiency and potential of the police force. Timely intervention can prevent much of the damage due to stress. It is said that to recognize the problem is itself a major step is handling it effectively. Thus, the present study makes an attempt to investigate the nature of stress experienced by the police personnel. The next chapter presents a review of literature on research theme.

# *Chapter – 3*

## *Literature Review*



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### Chapter 3: Literature Review

This chapter reviews the literature related to the theme of this research. With studies on various aspects of the theme pouring in at an incessant pace, the literature has grown manifold. This chapter presents a comprehensive review of the literature especially on role stress, personality traits and police. The review covers both conceptual and empirical contributions to the subject of study. Literature has been reviewed under different sub-sections.

#### 3.1 Studies on Stress

Every human being encounters various kinds of challenges in his or her life. Different ages have different kinds of stress. In the prehistoric age, the nature was the main source of almost all stresses. Man was stressed due to factors like threat of wild animals, natural disasters; such as earthquake, flood, excessive rain, drought, famine, epidemics, and climate dangers; such as thunder and storm, inter group conflicts for searching food and living resources. The present day, world has witnessed substantial progress in science and technology. Now, man can manage the nature with greater confidence. However, other stressors have substituted natural stressors. Wars and conflicts for power have become a potent source of stress. Again, with the emergence of industrial society, new forms of stressors have replaced the earlier ones. These stressors may be political & economical uncertainty, regionalism, communalism, terrorism, urbanization, threat of war, nuclear threat, unemployment, poverty and job insecurity.

Over the past six decades, the stress had been *the source of immense interest* (Doublet, 2000). But it is an old concept. The term had evolved over several hundred years. Its *discovery* in the twentieth century was more of a *rediscovery* (Cassidy, 1999). It had been used in medicine for centuries (Hinkle, 1977). Robert Burton (1624) wrote about the sources of disease and melancholy (depression). He mentioned social stress as a key malady (cited in Hobfoll, 2004). In Indian context also, stress found a mention in the *vedic* literature, whereas it appeared as *Dukha* (Grief) and *Dushchinta* (anxiety). Walter Cannon was credited for originating research on the body's response to stressors. Cannon (1914) first published his investigations on the *adrenal medulla*, in which he asserted that emotional stimuli were capable of releasing a substance which would prepare the animal for *flight* or

for *defense*. In fact, Cannon was also the first person to use the term *stress* to refer to the physiological reactions caused by the perception of aversive or threatening situations (Bryce, 2001). Aziz (2004) noted that the phenomenon was old and inevitable which pervaded the human life right from the birth till death.

The present work environment has witnessed changes due to technological advances, organizational restructuring and various redesign options (Perrewe et al., 2000). These changes are potent enough to elevate levels of work stress (Conner & Douglas, 2005). This increased stress has led to a rise in the number of employees who have considered leaving their jobs. In order to provide stress management interventions, it is important to assess the stress in various contexts. Some of the studies are mentioned below. For ease of comparing the results between India and abroad, the review is categorized in two parts i.e. *International studies on stress* and *Indian studies on stress*.

### **3.1.1 International Studies**

The phenomenon of stress in the organizational context was initially explored by Kahn & his colleagues (1964). In the early 1960s, Kahn et al. developed a research programme and succeeded in finding a number of stress-inducing factors within organizations and how they are connected with unfavorable mental and physical consequences (French & Caplan, 1972).

Picking up the thread, Rizzo et al. (1970) examined the relationship of *Role Conflict* and *Role Ambiguity* with anxiety, influence in organization and propensity to leave the organization. The study indicated that role conflict and role ambiguity both tended to correlate weakly but positively with anxiety and propensity to leave the organization. On the other hand, *Role Conflict & Role Ambiguity* both negatively correlated with influence in the organization. The study indicated stronger negative relationship between role ambiguity and job satisfaction.

Johnson (1979) investigated the relationship between situational and individual variables with role stress, psychosomatic symptoms and job satisfaction in entry level police and safety officers. The study reported that high role stress was significantly correlated with low group cohesiveness, high need for independence,

low need for achievement, high dogmatism, less distortion in responding, external locus of control and more psychosomatic symptoms.

Oliver's (1980) study on 208 employees in two Canadian retail organization reported that functional interdependence failed to moderate the relationships among social task characteristics, role conflict and outcomes such as job satisfaction, tension, tendency to leave the organization, satisfaction with contextual factors (peers, supervisors, pay and job security) and growth satisfaction. The moderating effects of *Role Conflict* on the task characteristics were found to be highly significant.

Abdel-Halim's (1982) study focused on 89 middle-lower managerial personnel in a manufacturing firm. Instruments included the *State-Trait Anxiety Inventory* and items from the *Job Diagnostic Survey* and *Leader Behavior Description Questionnaire*. The results indicated that social support variables from the work group and from the supervisor moderated the relationship of *Role Conflict* with job satisfaction and job involvement but not with job anxiety.

Osipow et al. (1985) noted that older respondents generally report more overload and responsibility, boundary role, and physical environmental stress than their younger counterparts. Older subjects also displayed a trend towards decreasing vocational, psychological, physical and interpersonal strain than younger ones, and greater recreational self care and rational cognitive resources than younger subjects. The study pointed out towards the possibility of age moderating the stress-strain relationship.

Steffy & Laker (1991) noted that role stressors, perceived employment insecurity, and recent stressful life events led to greater alcohol intake and a propensity to use alcohol to relax and cope with work and personal tensions. Excessive workload contributed to use of alcohol as a coping mechanism among subjects.

Akinnusi (1993) assessed how level of education was associated with stress among managers. Positive correlation was reported between education and psychological stress. Highly qualified managers were also subject to more organizational stressors but suffer less job stress, probably because they occupy positions of authority and their jobs were more intrinsically satisfying than their less qualified counterparts.

Terry et al. (1993) investigated the effects of work stress on *psychological well-being* and job satisfaction among 153 employees of a large public sector organization. Role ambiguity and role conflict emerged as significant predictors of both psychological well-being and job satisfaction. There was also some support for the proposed role of under-utilization of skills. However, quantitative work overload did not have a significant effect on either psychological well-being or job satisfaction. It was also reported that irrespective of the level of stress, supervisor support had main effects on employee's well-being.

Vander & de Heus (1993) examined the difference between male and female Dutch managers in respect of work stress, social support and strains. They reported that although both work and life support were negatively correlated with work stress, only weak support was strongly correlated to each measure of strain.

Eriksen (1994) reviewed the literature to assess the role of social support in the pathogenesis of coronary heart disease. It was reported that social support was capable of moderating potentially harmful negative emotions and the potentially harmful cardiovascular response to psychological challenge. However, a lack of control with personality factors in most of the studies made this conclusion uncertain.

Spielberger & Reheiser (1994) measured perceived psychological severity and anxiety of 30 job stressor events, using men and women as subjects working in the university and corporate settings. The study revealed that overall stress level was similar for men and women. However, significant differences were reported in perceived severity and frequency of occurrence of individual stressor events as per gender.

Williams et al. (1997) reported that high job demands and low decision latitude were positively correlated with negative emotions (for instance; anxiety, anger and depression), reduce level of social support and negative feelings in dealing with coworkers and supervisors.

Sparks & Cooper (1999) opined that in order to get the better understanding of the relationships, the stress model should be more specific to the sample. They emphasized the need to develop occupation-specific stress questionnaire to pinpoint the particular stressors in an occupational group.

Picking the idea, Fairbrother & Warn (2003) carried out a study on 100 naval officers comprising 65 males and 35 females using a tailor-made questionnaire for the group. The median age for the group was 21 years and 90 percent of the group was 25 years or younger. Major stressors reported for naval officers were *lack of clarity in the work role*, disruption of everyday routine, disruption of personal life. Discomfort due to physical environment, psychosocial factors of leadership, team work and social climate were not noted stressful for naval officers. It was also reported that job satisfaction had influence of supportive *work climate*, *perception of being a part of a team* and an absence of feelings that one's personal life had been disrupted.

Larson (2004) examined the job stress among 683 internal auditors who were members of the American Institute of Certified Public Accountants. Stress diagnostic Survey (SDS; Ivancevich & Matteson, 1983) was used to collect the data. Respondents indicated that the organizational role stressors in their work environment were more stressful than individual job factors, such as time pressure and overload stress. The major sources of stress were *competition for rewards*, *politics* and career development.

Aizzat et al. (2005) assessed the influence of organizational variables (conflict, blocked career, alienation, work overload, and unfavorable work environment) on job stress among managers. It also examined whether this relationship varied according to the individual's level of *Neuroticism*. The study selected 285 respondents. Results of hierarchical regression indicated that three of the five organizational variables (conflict, blocked career, and alienation) had significant positive effects on job stress. *Neuroticism* was found to moderate the effects of the three organizational stressors (alienation, work overload, and unfavorable work environment) on job stress.

Yahaya et al. (2009) explored the causes of occupational stress within the organization and its implication on job satisfaction, intention to leave and absenteeism. Findings indicated that occupational stress had no direct effect on *intention to leave* and *absenteeism* but had direct negative effect on job satisfaction. Job satisfaction reported negative effect on intention to leave and absenteeism. The study suggested a need to increase job satisfaction by reducing

occupational stress. By reducing stress companies could reduce intention to leave and absenteeism among employees.

Aghdasi et al. (2011) surveyed 234 Iranian employees to analyze direct and indirect effects of *Emotional Intelligence* on occupational stress, job satisfaction and organizational commitment. The study indicated that emotional intelligence did not have any direct and indirect effect on occupational stress, job satisfaction, and *Organizational Commitment*. Moreover, occupational stress not only had a direct negative effect on job satisfaction, it also had an indirect negative effect on organizational commitment. Job satisfaction had a strong direct positive effect on organizational commitment.

Cicei (2011) undertook a study on 102 employees of five Romanian public organizations to identify the relationship between occupational stress and organizational commitment. It was indicated that high level of stress could lead to low organizational commitment, which could contribute to employee turnover and might lead to low firm's performance.

Feizabadi et al. (2012) carried out a study on 348 respondents to assess the relationship between job stress and the quality of life in sports teachers in *Masshad* city. The result of the study indicated that there was no significant difference in stress with respect to fair pay, social dependence of work life, overall life space, social integrity and development of human ability.

The studies mentioned above indicate an active interest among researchers towards the theme of organizational stress. It may be inferred from the studies that job demands, low decision latitude, lack of social support, negative relationship with coworkers & supervisors, negative work environment, time pressure, lack of growth opportunities etc. are the major sources of organizational stress worldwide. The consequences of stress were greater alcohol intake, absenteeism, intention to leave the job, lesser job satisfaction, low organizational commitment and increased level of negative emotions.

### **3.1.2 Indian Studies**

With modernization and technological advancement, the number of people encountered with stress in India has also increased manifold. In this section, the studies related to organizational stress in Indian context has been presented.

It was observed that worst victims of mental stress were businessmen and business executives (Nagarajan, 2007). Shah (1980) studied the impact of stress on a sample of officers representing cooperative banks, market and consumer society, industrial society, and cooperative departments. The psychological consequences felt by these officers were *fatigue, exhaustion, migraine, headaches, hypertension, loss of appetite, indigestion, sleeplessness* and *dizziness*.

Parasuram & Alutto (1981) conducted a study on individuals in middle and junior level positions. He noted that *role frustration* and *technical problems* were the major sources of stress.

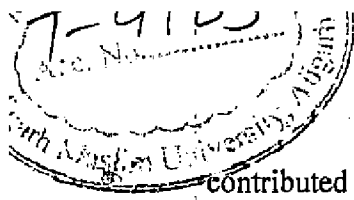
Srivastava (1982) was interested to understand the relationship between employee's production level and role stress. The results indicated that the employees belonging to high and low level production groups significantly differed from each other with regard to their indices of perceived role stress. The employees producing more were observed to perceive lesser ambiguities, conflicts and workload with regard to their job roles as compared to those belonging to low producing group.

Sreelatha (1988) observed that managers who were young and were earning higher salary experienced more organizational stress, *Role Overload* and *Role Conflict* than the managers that were older and were earning less salary.

Singh & Nath (1991) explored the effects of organizational role stress on job involvement among banking personnel. The results indicated that subjects with high organizational role stress (overall as well as dimension wise) had lesser job involvement in comparison to the subjects having low organizational role stress (overall as well as dimension wise).

Srivastava (1991) conducted a study on 300 supervisory personnel and investigated the effects of the avoidance and approach modes of coping on organizational stress and mental health. *Organizational Role Stress (ORS) scale*, the *Mental Health Questionnaire (MHQ)*, and the *Projective Instrument for Coping Strategies* were administrated to respondents. Role Stress exhibited positive relationship with mental health. It was also observed that approach group experienced more role stress than the avoidance group, but scored lower on the MHQ than the avoidance group. The findings suggested that approach coping





contributed to immediate perceived stress, but in the long run reduced tension and anxiety. However, avoidance strategies might reduce immediate stress, but in the long run led to greater tension and anxiety.

Pandey (1995) conducted a study on rail engine drivers of Indian Railways to explore the relationship between role efficacy and role stress. The respondents reported *Role Overload*, *Resource Inadequacy* and *Personal Inadequacy*. In this study, level of education was positively correlated with the role stress.

Bhatt (1997) studied the relationship between job stress, job involvement and job satisfaction among male and female primary school teachers. The sample was selected from public and private schools. The result indicated that job stress of public school teacher was significantly and negatively associated with job involvement. Job satisfaction and job involvement were significantly and positively correlated. The result also indicated significant negative partial correlation on job involvement between private and public school teachers.

Parveen (1999) conducted a study on 140 managerial personnel comprising commercial managers (N=70) and technical managers (N=70) to assess the organizational role stress and perceived organizational climate on employees' health. It was noted that some dimensions of organizational role stress and organizational climate influenced physical and psychological health of both groups of managers.

Nirmala (2002) attempted to identify main sources of occupational stress. He also examined the relationship between various sources of occupational stress and job performance. The respondents were 175 cashiers-cum-clerks of nationalized banks of Haryana. The findings indicated a negative correlation between the major sources of occupational stress and job performance.

Sharma et al. (2010) carried out a study on 150 lawyers to determine the impact of burnout and psychosocial stressors on the job satisfaction. The factors causing job dissatisfaction were reported as *Emotional Exhaustion*, *Depersonalization*, *reduced Personal Accomplishment* and stress. Females' lawyers reported significantly higher psychosocial stressors and burnout as compared to males.

In summary, it can be concluded that almost all the occupational groups are experiencing stress at workplace. It is also evident that stress decreases job satisfaction and organizational commitment. The employees experiencing work stress are under threat of physical and psychological disorders. They also report an intention to leave the organization. The studies mentioned above are based on the various instruments measuring stress among employees. As discussed earlier, *Organizational Role Stress* (ORS) scale is an oft used instrument to measure role stress. In the next section, the studies that have specifically employed Organizational Role Stress (ORS) scale to assess stress are being perused.

### 3.1.3 Studies based on ORS

The credit for introducing concept of role into organizational research is generally given to Kahn et al. (1964) with the publication of their book entitled *Organizational Role Stress: Studies in Role conflict and Ambiguity*. They proposed a *Role Episode Model* in their study of the organizational stress. It exhibited the interaction between the role sender and role incumbent (focal person) including feedback loop from the incumbent back to the role senders and from the role senders back to incumbent. They further clarified that to adequately perform his or her role, person must know what were the expectations of the role set (rights, duties and responsibilities), what activities would fulfill the role responsibilities, what consequences or role performance were to *self*, others and the organization. Pareek (1976) used the term *role* to indicate the position of person in the system. Later on, Pareek (1993) explained an individual's role in terms of two role systems i.e. *Role Space* and *Role Set*.

The ORS scale was developed by a team of researchers at Indian Institute of Management Ahmedabad (IIMA), headed by *Prof. Udai Paeeek*. Some ORS scale (Pareek, 1983) based studies are mentioned below:

Ahmad et al (1985) conducted a study of stress among executives. A group of 30 executives from the public sector and another group of 30 executives from the private sector were compared on role stress. Out of ten dimensions of role stress, significant differences were observed on only three dimensions i.e. *Role Isolation*, *Role Ambiguity* and *Self Role Distance*. It was noted that public sector executives experienced slightly more stress than their counterparts of the private sector.

Kumari & Sharma (1990) examined the relationship and the moderating role of social support on four indices of well-being, namely, organizational role stress, anxiety, job satisfaction, and general well-being on 200 male medical doctors. Doctors with higher social support perceived less stress in their organizational roles, were less anxious, had more job satisfaction and had better well-being than their counterparts with lower social support.

Singh & Singh (1992) approached 400 middle level managers to know the effects of role stress, organizational climate and ego-strength on the psychological strains namely, environmental frustration, anger reactions, latent hostility and job-anxiety. The results indicated significant differences between the mean scores of environmental frustration, anger reactions and job-anxiety in high and low role stress groups; between the mean scores of job anxiety in high and low organizational climate groups and between the mean scores of job anxiety in high and low ego-strength groups. The Interaction effect of all the three variables (role stress, organizational climate and ego-strength) on psychological strains was also found to be statistically significant.

Pandey (1998) carried out a study on 450 BHEL, Haridwar employees to assess the impact of personality dimensions on the organizational role stress of the employees. The findings of the study indicated that *Psychoticism-reality* and *Neuroticism-stability* dimensions were found positively associated with individuals' perceived organizational role stress. On the other hand, *Extroversion-Introversion* dimension was found negatively associated with perceived organizational role stress. The findings of this study indicated that high degree of psychotic (tough mindedness) and neurotic (emotional) tendencies in one's personality might lead to high degree of role stress and *Extroversion* tendency.

Mohan & Chauhan (1999) conducted a study on 174 middle level managers from Government, Public and Private sectors. The study compared the organizational role stress among government, public and private sector managers. The managers of Public Sector experienced higher *Role Erosion* and *Self Role Conflict* followed by Government and the private sector. The private sector reported a better work climate which was giving enough forward orientation in one's job role and also less amount of intra-personal conflict situations.

Mishra & Bhardwaj (2003) undertook a study on a sample of 120 male air traffic controllers working at three major international airports of India, namely, Delhi, Calcutta and Mumbai. The results reported that *Inter Role Distance* and *Resource Inadequacy* were dominant stressors whereas *Personal Inadequacy* and *Role Ambiguity* were least contributors of role stress.

Aziz (2004) carried out a study on 264 women information technology professionals to investigate the intensity of role stress among women in the IT sector. It was observed that women information technology professionals were experiencing high degree of role stress. *Resource Inadequacy* emerged as the most potent stressor among the women IT professionals.

Ahmady et al. (2007) conducted a study on 333 faculty members of three public medical schools in Iran to investigate the organizational role stress. The findings indicated that all faculty members were experiencing high level of role stress. The major stressors identified among faculty members were *Role Overload*, *Role Expectation Conflict*, *Inter Role Distance*, *Resource Inadequacy*, *Role Stagnation*, and *Role Isolation*.

Lehal (2007) carried out a study on 200 executives from public and private sectors of Punjab to assess the *Organizational Role Stress* (ORS) and *Job Satisfaction* (JS) among the executives. The study reported that the executives of public sector were experiencing less ORS and high JS than executives of private sector. Further in public sector, female executives were more stressed than their male counterparts. On the other hand, female executives of public sector were reported experiencing higher satisfaction level. It was also reported that organizational role stress and job satisfaction had a strong but negative correlation.

Bhattacharya & Basu (2007) examined relationship of gender and age on the *Distress*, *Wellness* and *Organizational Role Stress* among professionals. Results of the study reported that women were experiencing greater wellness and older personnel were experiencing more distress.

Lu (2008) conducted a study on 246 nurses of Philippines, both female and male, to investigate the organizational role stress among them. The questionnaires assessed five main role stress indices, namely; burnout (Maslach Burnout Inventory, 1982), organizational role stress (Pareek, 1993), Self-efficacy

(Schwarzer & Jerusalem, 1995), Hazard exposure (Lu, 2005) and Situational Factors (*Minnesota Satisfaction Questionnaire Short Form*). The study indicated that there was a significant correlation existing among burnout and *self-efficacy*, *hazard exposure* and organizational role stress. In addition, organizational role stress and age had been reported to be the most significant predictors of burnout.

Tankha (2006) investigated the effect of role stress in a sample of 120 nursing professionals of government and private hospitals. The results indicated that male nurses were experiencing significantly higher stress level than female nurses. Second, male nurses of private hospitals reported significantly higher stress than the government nurses on eight out of the ten dimensions of Organizational Role Stress Scale.

Dasgupta & Kumar (2009) collected data from 253 doctors to understand sources of role stress among doctors of Shimla. The factors causing role stress among doctors were *Role Overload*, *Self Role distance*, *Role Isolation*, *Inter Role Distance*, *Role Stagnation*, *Role Expectation conflict*, *Role ambiguity* and *Role Inadequacy*. *Role Overload* recorded 40 percent variance making it most significant stressor among the doctors. Overall, no significant difference was reported on stress levels between male and female doctors except on Inter-role distance and Role Inadequacy.

Agrawal & Majupuria (2010) carried out a study to examine the role stress among Indian chartered accountants (CAs). The results indicated the presence of moderate levels of role stress among CAs. *Role Overload* emerged as the most potent stressor for CAs. But, they indicated low levels of *Role Erosion* and *Role Ambiguity*. Female CAs had higher levels of *Role Stagnation* while male CAs reported more *Role Ambiguity*. In addition, the *Role Expectation Conflict* was higher in CAs working as employees than those running their own professional practice.

Cardoso & Fernandes (2011) carried out a study on 147 doctors of Goa Medical College to assess the impact of *marital status*, *management level* and *social support* on organizational role stress. The results indicated that stress had no relationship with marital status. However role stress had a negative correlation with level of management as well as social support.

Chaturvedi (2011) investigated the difference in role stress among teachers (both male and female) working in private and government institutes. The total sample of the study was 180. It was reported that women employees were more stressed than their male counterparts. Age was observed to have a significant impact on stress level.

It may be noted from the studies perused above that the employees across occupational groups are experiencing role stress. While comparing the nature and intensity of stress, it is found that ATC, police, doctors and nursing are relatively more stressed occupations than others. Although different occupational groups have different role stressors but most of them are experiencing *Inter Role Distance* and *Resource Inadequacy*. It is also noted that female employees are experiencing more stress than their male counterparts.

As the study is aimed to assess the relationship of personality traits with role stress, studies in respect of personality are perused in the next section.

### 3.2 Studies on Personality

The idea of personality is an old one. *Aristotle*, *Theophrastus* and *Hippocrates* are cited as progenitors to the trait approach of personality (Morgan, 2008; Allport, 1937; Matthew et al., 2003). Aristotle, the celebrated Greek philosopher had done pioneering work on moral conduct. He argued in his theory of *Golden Mean* that moral behavior is the product of dispositions (Aristotle, n.d./n.d.; Hergenhahn, 2005; Matthews et al., 2003). On the basis of Aristotle teachings, Theophrastus created character sketches. The sketches described how a person is expected to act in most situations. The character descriptions were considered as consistent across both time and place (Allport, 1961).

Centuries later, *Hippocrates* (370 BC), father of medicine, described bodily *humours* as causative agents in pathology (Hergenhahn, 2005; Hippocrates, n.d./1952). He argued that human body contained four humours, namely - yellow bile, black bile, blood and phlegm (Allport, 1937; Friedman and Schustack, 2003; Hergenhahn, 2005). Galen (190 AD), after Hippocrates, described the relationship between the humours and corresponding character (Table 3.1).

**Table 3.1: Relationship between Humours and Characters**

S. No.	Fluid	Humour/Temperament	Character
1.	Yellow bile	Choleric	Irritable, quick tempered, fiery
2.	Black bile	Melancholic	Depressed, negative affects
3.	Blood	Sanguine	Optimistic, positive, cheerful
4.	Phlegm	Phlegmatic	Calm, lethargic, unemotional

Source: Morgan, 2008

It was reported that the description of melancholic temperament resembled with the modern day personality trait of *Neuroticism* (Matthews et al., 2003). Kant placed these four humours into two dimensions, which he labeled as *feeling* and *activity* (Hergenhahn, 2005; Matthew et al., 2003). After many years of research, Wundt (1893, 1902, and 1904) argued that these four humours were the interaction effect of two dimensions. He crystallized these dimensions as *strong-weak emotions* versus *changeable-unchangeable activity* respectively (Hergenhahn, 2005). The original views of Kant and Wundt were cited as resembling the present-day traits of *Neuroticism* and *Extroversion* (Eysenck, 1960; Guyer, 2006). Further, the research of Galton (1884) on personality noted that personality differences existed in all languages (Goldberg, 1990). At that time, modern statistics analysis such as factor analysis, structure equation modeling, correlation and regression did not exist. The times have changed. With the advent of these methods, and the influence of viewpoints of Allport, Eysenck and Cattell, the modern approach of personality traits had flourished (Matthews et al., 2003).

The first major theory of personality was propounded by *Allport*. He believed on the assumption of *Uniqueness* and *individual differences*. Allport & Odbert developed a list of 17,953 adjectives, which are generally used to distinguish between individual behaviors (Allport & Odbert, 1936). After compiling the terms, Allport began his work to determine a basis for a psychological

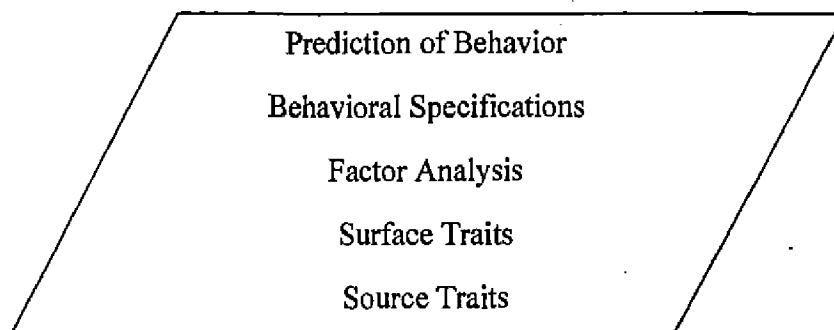
classification of terms (Allport, 1937; Allport & Odbert, 1936). Furthermore, Allport & Odbert achieved their objective after creating four parallel columns. Each column was created in such a way to describe a fundamental aspect of personality. As the founder of the systematic study of personality psychology in United States, Allport's contributions were monumental and continue to influence contemporary thinking in personality psychology (Funder, 1991). The task of abridgment of Allport's list was done by *Cattell* (Friedman & Shustack, 2003).

*Cattell* favored *data-based* approach as the best approach to define the nature and the operations of personality (Carducci, 2009). *Cattell* preferred to base his personality theory on empirical observations. *Cattell's* approach was based on structural learning and systems (Cattell, 1980; Ryckman, 1993). This approach examined the transactions occurring between personality and environment (Ryckman, 1993). *Cattell* attempted to account for individual differences in personality by simplifying and objectifying the composition of personality. He used mathematical and statistical techniques to achieve the objective (Cattell, 1980; Eysenck, 1994; Friedman & Schustack, 2003). *Cattell* liked Allport argument that languages were accountable for individual differences in personality (Eysenck, 1994). On the basis of the notion, *Cattell* re-examined the list of terms formulated by Allport & Odbert (1936; Eysenck, 1994). Further, *Cattell* grouped synonyms and antonyms of the terms together, used by Allport & Odbert's list (1943 cited in Taylor, 2004). *Cattell* created 160 bipolar categories. He also included terms related to interests and abilities to the list and created 171 bipolar categories of the traits (1943 cited in Taylor, 2004). Further, *Cattell* applied Cluster analysis on these traits, which produced 67 trait variables. *Cattell* subsequently researched on these 67 traits variables (1945; 1947 cited in Taylor, 2004) and reduced these 67 variables into 12 factors. Later, these 12 factors led to the development of the *16 Personality Factor Questionnaire* (16-PF; Cattell et al., 1970).

The basic concept of *Cattell's* viewpoint are designed to achieve what he felt was the basic goal of personality psychology. The goal of the *Cattell's* approach was to predict what an individual will do in specific situation (Carducci, 2009; Figure 3.1).



**Figure 3.1: Cattell's Viewpoint**



Source: *Cradducci, 2009*

*Eysenck* (1994) criticized Cattell's theory and argued that it provided an erroneous explanation of traits and Cattell failed to explain the features of the personality traits. On the basis of his own ideas, Eysenck presented his theory of hierarchical nature of traits.

*Eysenck theory* of trait had main focus on scientific pursuits as well as conceptual clarity (Pervin & John, 2001). As Cattell, Eysenck also relied on factor analysis extensively to help identify the existence of the underlying dimensions of personality. But, he did not rely solely on the factor analysis, but he also emphasized the conceptual part of the personality (Cradducci, 2009). Eysenck proposed three basic types of personality traits, namely, *Extraversion-Introversion* (E), *Neuroticism* (N), and *Psychoticism* (P). The theory was criticized arguing that these three dimensions in personality were not able to capture all individual differences. Criticism gave emergence to five factor model of personality traits.

Costa & McCrae (1991) proposed *five factor model* of personality traits. These five factors were identified as *Neuroticism*, *Extroversion*, *Openness to Experience*, *Agreeableness* and *Conscientiousness*. Zuckerman & his colleagues (1988, 1991) proposed an alternative approach to five factor model and they developed an *alternative five factor model*. The model was developed by comparing 46 commonly used scales based on three, four, five and six dimensions of personality questionnaires. Zuckerman (1993) concluded that both the three factor model of Eysenck and five factor model of McCrae & Costa were robust and reliable. Based on these understandings and further statistical analysis of the data, a new questionnaire was developed, known as *Zuckerman Kuhlman Personality*

*Questionnaire* (ZKPQ scale). The items of ZKPQ scales were aimed to define the five factors more clearly. The scale also excluded the items showing a strong social desirability influence (Aluja et al., 2006).

At the beginning of the twenty-first century there was an ongoing debate about the different structural models that described human personality. Till date, Eysenck's three-factor and the five-factor model were the most widely investigated. These models had been largely replicated across different languages and cultures (Kallasmaa et al, 2000; McCrae & Costa, 1997), creating more attention than Cattell's (1957) and Guildford & Zimmerman's (1956) personality models.

Two dimensions could define the most basic and parsimonious personality structure; *Extraversion* and *Neuroticism*. First historical view of these dimensions was provided by the Hippocrates *humoral* theory. Furthermore, Wundt proposed an important change from the categorical typology of personality to a quantitative two-dimensional taxonomy, considering two basic characteristics related to affective reactivity: the *strength of emotions* and the *speed of change*. The former would correspond to *Neuroticism* (or anxiety according to Cattell), while the latter would be equivalent to Eysenck's *Extraversion*. These two dimensions had strong temperament loading, and they were related to both emotional levels and activity. A third basic dimension of personality called *Psychoticism*, was subsequently developed (Eysenck & Eysenck, 1976). *Psychoticism* is usually defined by a lack of empathy, cruelty, impulsiveness, hostility, aggressiveness, emotional indifference, socialization deficit and psychopathy. *Psychoticism* is also defined as a personality dimension of a temperamental nature that differs from *Extraversion* and *Neuroticism* which would be closer to the domain of character. It can be concluded after twenty five years of research that *Psychoticism* is a fundamental component of personality that allows understanding the socialization process, both in children and adults (Aluja, 1999).

Zuckerman, Kuhlman & Camac (1988) and later, Zuckerman, Kuhlman, Thornquist & Kiers (1991) proposed an alternative five factor model formed by *Impulsive Sensation Seeking*, *Aggression-Hostility*, *Activity*, *Sociability*, and *Neuroticism-Anxiety*. Furthermore, Aluja, Rossier, Garcia, Algleitner, Kuhlman &

Zuckerman (2006) proposed a cross-cultural shortened form of the Zuckerman Kuhlman personality Questionnaire (ZKPQ-50-CC).

The five factor personality model integrates *Extraversion*, *Neuroticism*, *Agreeableness*, *Conscientiousness* and *Openness to Experience* or Culture. *Agreeableness* and *Conscientiousness* have been related to socialization whereas *Openness* is defined by a wide range of interests, non conformism, intellectual curiosity, high speed for variety and liberal in the value systems (Costa and McCrae, 1992). Unlike the Costa & McCrae model, the Eysenck and Zuckerman models provide a casual explanation of personality (Aluja et al., 2004a). Zuckerman-Kuhlman Personality Questionnaire is of particular interest for the present study because this provides an alternative five-factor structure that includes dimensions of *Impulsive-Sensation Seeking*, *Neuroticism-Anxiety*, *Aggression-Hostility*, *Activity* and *Sociability* that is of particular significance in the context of police personnel. The preceding discussion traces evolution of trait approach of personality. The next section presents a review of empirical studies carried out based on these personality theories.

### 3.2.1 Studies on Personality Traits

Schweiger et al. (1998) evaluated 51 healthy students (15 male, 36 female) to examine the relationship between an individual's *autonomic tone* and his prominent personality traits. A wide range of personality factors were assessed in the study. The personality factors were assessed through questionnaires, namely, 'Freiburger Personality Inventory' (FPI-R; Fahrenberg et al., 1984), a German version of the 'Manifest Anxiety Scale' (MAS; Luck & Timaeus, 1969) and one German version of 'Inventory for the Assessment of Psychosomatic Illness Processes' ('Fragebogen zur Abschätzung des psychosomatischen Krankheitsgeschehens' [FAPK]; Koch, 1981). The physiology was measured through pre-ejection period and High Frequency power. ANOVA and ANCOVA were used for analysis. Results of two-factor ANOVAs revealed substantial differences in personality characteristics depending on the level of sympathetic and parasympathetic tone respectively. But no significant interaction effects were found. The study also reported relationships between sympathetic tone and some prominent personality traits.

Busato (1999) carried out a survey on the sample of 900 university students to identify the relationship among learning styles, the Big Five personality traits and achievement motivation in higher education. Three instruments were used for data collection, viz. *Learning style* (ILS; Vermunt, 1994) and *vijf persoonlijkheidsfactoren test* (5PFT; Elshout & Akkerman, 1975) and *prestatie-motivatietest* (PMT; Hermans, 1976). The analysis revealed that *Extraversion*, *Conscientiousness*, *Openness to experience* and *Agreeableness* correlated positively with the *meaning directed*, *reproduction directed* and *application directed learning style*. *Conscientiousness* and *Openness to Experience* were associated negatively with the *undirected learning style*. Besides, it was observed that *Neuroticism* correlated positively with the *undirected learning style* and negatively with the *meaning and reproduction directed learning style*. Positive correlations were found for *Achievement Motivation* with the *meaning*, *reproduction* and the *application directed learning style*, and a negative one with the *undirected learning style*.

Lauriola & Levin (2001) carried out an exploratory study on 76 subjects (38 males and 38 females) for examining the relationship among personality traits, socio-demographic factor and risky decision-making. The two instruments administrated were *Short Adjective Checklist* measuring the Big-Five (SACBIF; Perugini & Leone, 1996) and a pictorial questionnaire for measuring the risk taking. Correlation and Sequential regression analysis were used for analysis. It was reported that personality traits had a relationship with risky decision making. Personality traits had a different relationship for gains and losses. Participants scoring high on *Openness to Experience* were associated with greater *risk-taking*. Similarly participants, who had a higher score on *Neuroticism*, were associated with less *risk-taking*.

Lounsbury et al. (2007) examined personality traits of 1059 information technology professional to identify the job satisfaction and career satisfaction in information technology sector. Personality traits were measured using *Personal style Inventory* (PSI; Lounsbury & Gibson, 2006). Job satisfaction was measured by a seven item scale and career satisfaction by a five item scale developed by Lounsbury et al. (2004). The results demonstrated that personality traits were

linked to both the job satisfaction and career satisfaction of IT professionals. *Emotional Resilience* was observed to be highly correlated with *job satisfaction* and *career satisfaction*. It was also reported that introverts were better suited for IT work.

Zhang (2007) investigated the impact of personality traits on teaching styles among Chinese high school teachers. The study was conducted on 157 teachers of two senior high schools in Nanjing, the People Republic of China. Apart from some qualitative measures, two instruments were used to measure the responses, namely; *Thinking Style in Teaching Inventory* (TSTI; Grigorenko & Sternberg, 1993) and *NEO Five-Factor Inventory* (NE)-FFI; Costa & McCrae, 1992). The study reported that teachers' personality traits played a significant role in their teaching styles beyond their gender, educational level, and their perceptions of the quality of their students. It was also observed that the teachers who were highly educated were significantly more creative in their teaching (Type I styles; legislative, judicial, hierarchical, global, and liberal styles), but significantly less conservative in their teaching (Type II styles; executive, local, monarchic, and conservative styles). The study noted a significant positive relationship between *Conscientiousness* and three teaching styles (legislative, judicial, and liberal). The study reported a significantly negative relationship between the *Openness* scale and all Type II styles.

Chamorro-Premuzic et al. (2007) conducted a study on 112 students and non-student participants. This study examined the role of *trait emotional intelligence* on *happy personality*. Three instruments were administered in the study, viz. *Ten Item Personality Inventory* (TIPI; Gosling et al., 2003), *Oxford Happiness inventory* (OHI; Argyle et al., 1989), and *Trait Emotional-Intelligence Questionnaire-Short Form* (TEIQue-SF; Petrides & Furnham, 2006). Four of the five personality traits, namely, *Stability*, *Extraversion*, *Conscientiousness* and *Agreeableness*, were positively correlated with both *Happiness* and *Trait Emotional Intelligence*. A significant amount of shared variance between *Happiness* and the personality traits was explained by *Trait Emotional Intelligence*. The shared variance partly mediated *Stability* and *Conscientiousness* to *Happiness*, and fully mediated *Agreeableness* and *Happiness*.

Chapman et al. (2007) conducted a study to examine the gender differences in five factor personality traits in an elderly sample of 486 older adults. Personality traits were measured by NEO-FFI questionnaire. The results revealed that older women had higher scores on *Neuroticism* and *Agreeableness* than older men.

Hirschi (2008) carried out a study on the sample of 492 Swiss adolescents to identify the personality complexes prevalent in adolescents on the basis of traits, interests, work values and self-evaluations. Personality Traits were measured by NEO-FFI, vocational interests by *Revised General Interest Structure Test* (AIST-R; Bergmann & Eder, 2005), work values by *Work Value Scale* (Ros et al., 1999), and core self-evaluations by *Inventory for the Measurement of Self-Efficacy and Externality* (FKK; Krampen, 1991). Exploratory and Confirmatory Factor analysis was performed to get the resultant factors. Five factors were identified which accounted for 60% of variance among the relations of the variables. The factors were *enterprising-conventional interests*, *favorable personality dispositions*, *social-artistic personality characteristics*, *investigative-realistic interests* and *work value endorsement*.

Yang et al. (2008) undertook a study on 2,773 students of Taiwan to evaluate the influence of personality traits and nonsevere life events on depressive episode in nonreferred adolescents. The data was collected from various instruments, namely, *Center for Epidemiologic Studies Depression* (CES-D; Radloff, 1977), *Juvenile Eysenck Personality Questionnaire* (JEPQ; Eysenck & Eysenck, 1975) and *Life Event Checklist* (LEC; Johnson & McCutcheon, 1980). The analysis indicated that only elevated *Neuroticism* was associated with a single episode of depressive *Symptoms*, whereas a medium level *Neuroticism*, *Extraversion* or *negative life events* exhibited association with the occurrence of two episodes. No interactions were found between all personality traits or between personality and negative life events.

Jensen and Patel (2011) carried out a study to predict Counterproductive Work Behavior (CWB) from the interaction of personality traits. The study included 517 employees (UK=97; Netherlands=183; Turkey=172 and Greece=65). Two types of CWB, namely, CWB-O (organization) and CWB-I (individual) were measured using *Voluntary Work Behavior Questionnaire* (Coyne & Gentle, 2006).

Personality Traits were measured by administering *Personality Item Tool* (IPIP; Goldberg, 1999). Confirmatory Factor Analysis was used. Results indicated that the interaction of traits increases the prediction of CWB over and above a single trait approach. The interactions suggest employees perform the least CWB when they are high on both traits (*Agreeableness & Emotional Stability*; *Conscientiousness & Emotional Stability* and *Conscientiousness & Agreeableness*). But low levels on either trait relate to increased CWB.

Amrai et al. (2011) conducted a study on 205 university students to examine the relationship between personality traits and *Spiritual Intelligence*. The findings reported that personality traits played a significant role in people's *Spiritual Intelligence*. Findings also revealed that there was a negative relationship between *Neuroticism* and *Spiritual Intelligence* and positive relationship between *Conscientiousness*, *Agreeableness* and *Extroversion*. *Openness* reported no relationship with *Spiritual Intelligence*.

Zhang (2011) collected the data from 362 (136 male, 226 female) students of China to examine the construct of hardiness with the personality traits among Chinese university students. Respondents filled the *Dispositional Hardiness Scale* (DHS; Bartone et al., 1989) and the *Revised NEO Personality Inventory*. Results indicated that younger students had high commitment and control hardiness than older students. Older students scored significantly higher on the *Neuroticism* scale, but lower on the *Agreeableness* scale. Female students scored higher on the commitment and control hardiness subscales, as well as on the *Agreeableness* and *Conscientiousness* than did their male counterparts. Results also indicated that personality traits statistically predicted *Hardiness* irrespective of age and gender among students. These results supported the argument that *Hardiness* represents a healthy personality disposition.

Peltokorpi & Froese (2012) conducted a study on 181 expatriate of Japan to examine the impact of their personality traits on cross-cultural adjustment. For measuring Cross-Cultural Adjustment, a 14-items scale developed by Black et al., 1989 was used. Expatriate personality was measured using *Multicultural Personality Questionnaire*. Confirmatory factor Analysis proved model fit for cross-cultural adjustment. The data analysis brought out positive relationships

among the personality traits of *Open Mindedness* & interaction adjustment, *emotional stability*, *cultural empathy* & general adjustment, and Social Initiative & work adjustment.

It may be noted from the studies perused above that *Neuroticism* has a negative association with risk taking, sensation seeking and spiritual intelligence while it is positively correlated with depressive symptoms and negative emotions. *Neuroticism* increases with age. On the other hand, *Extraversion* and *Emotional Resilience* are positively correlated with job satisfaction and career satisfaction. The focus of the present research is personality traits and stress. The section presents a review of studies focusing on both these variables.

### 3.3 Studies on Personality Traits and Stress

Various attempts have been made to identify factors that cause stress among people. Attempts have been made to establish a link between the incidence of stress and the personality of individuals. For instance, Akinboye & Adeyemo (2002) reported that some people were generally more stress prone while others were generally less stress prone depending on their personality traits. In the same vein, Riolli & Savicki (2003), Raedeke & Smith (2004) and Van-Dierendonck (2005) reported that personality characteristics of employees have the tendency to moderate the effect of stressful situations on employees such that certain traits may buffer or enhance more negative outcomes than others. Some of the research studies showing the relationship between personality and stress are presented below:

Harigopal (1980) investigated the influence of the personality factors *ego strength* and *dominance vs. submissiveness* on role stress variables viz. *role ambiguity* and *role conflict*. The results suggested that individuals having high and low ego strength differ significantly on role ambiguity and role conflict. *Ego Strength* was found to moderate the relationship between the *Role Ambiguity & Job Satisfaction*, *Role Ambiguity & Job Involvement*, and *Role Conflict & Job Involvement*. *Dominance vs. Submissiveness* was found to moderate the relationship between *Role Conflict* and *Job Involvement*.

Pruessner et al. (1997) examined 20 healthy non-smokers males to assess the association of personality traits and cortisol stress response. Data was collected



using *Questionnaire for Competence and Control* (FKK; Krampen, 1991) and the *Gissen-Test* (G-T; Beckmann et al., 1991). After first trial, personality traits did not correlate with cortisol stress response, but as the increasing number of cortisol responses was aggregated, significant correlations between variables were observed.

Cao et al. (2002) investigated personality abnormalities in patients with Chronic Tension Type Headache (CTH), Episodic Tension-Type Headache (ETH), Migraine with Aura and Migraine without Aura (MA). The sample size was 72 patients suffering from CTH, 33 with ETH, 15 with MA and 57 with migraine without aura. Personality traits were assessed using *Zuckerman Kuhlman Personality Questionnaire* (ZKPQ). ETH and MO groups showed significantly greater *Neuroticism-Anxiety* and depression. In addition, the MO group scored significantly higher on *Aggression-Hostility* than healthy controls. No abnormal personality trait was observed in patients with MA.

Harris et al. (2003) collected data from 144 undergraduate students and examined the relation between Big Five Personality Traits and anxiety about aging. Data was collected through *NEO-Five Factor Inventory* and the *Anxiety about Aging Scale* (AAS; Lasher & Faulkender, 1993). Findings noted a positive relation between neuroticism and overall anxiety about aging. Anxiety about aging was reported to be inversely related to *Agreeableness*, *Conscientiousness*, and *Extraversion* and reported no relation with openness to experience. In addition, the relationship among Big Five Personality traits and four dimensions of anxiety about aging (anxiety about changes in physical appearance, fear of old people, psychological concerns and anxiety about age-related losses) were noted as significantly different.

Persson & Orback (2003) selected 101 healthy women to examine the influence of personality traits on neuropsychological test performance and self reported health. Several instruments were administered for collecting the data, namely, the *Karolinska Scales of Personality* (KSP; Klinteberg et al., 1986), the *State Trait Anxiety inventory- Trait Scale* (Spielberger et al., 1983), *Neuropsychological tests* (WHO, 1985): General Knowledge tests like *Synonyms* (SRB; Dureman et al., 1971) and *WAIS-R Information* (Wechsler, 1992); Perceptual and motor speed test

like *APT two-choice visual reaction time* (APT RT-2; Levander & Elithorn, 1987); *the Milner pathway* (Milner, 1965), *Cronholm-Molander verbal memory test* (Cronholm & Molander, 1957), *General Health Questionnaire-30* (GHQ-30; Goldberg et al., 1978), *Symptom Checklist-90* (SCL-90; Derogatis, 1992), *Euro-Quest* (EQ; Chouaniere et al., 1997), *Job Content questionnaire* and *Interview schedule for Social interaction*. Bivariate regression analyses reported that both age and years of schooling influenced performance in neuropsychological test scores. The analysis indicated statistically significant effects of KSP psychic anxiety in 10 of the 15 outcome measures. The high-anxiety half of the subjects had higher symptom scores, lower availability of social interaction scores as well as lower adequacy of attachment scores than low-anxiety half of the respondents. Aizzat et al. (2005) conducted a study on 285 managers to determine the influence of organizational stressors (conflict, blocked career, alienation, work overload, and unfavourable work environment) on job stress among managers in Malaysia. The study also examined whether this relationship varied according to the individual's level of neuroticism. Organizational Stressors were measured using a 25-items questionnaire developed by Davis et al. (2000). The other two instruments were 12-items scale derived from *NEO Five Factor Inventory* and 20-items screening inventory (Goldberg & Hillier, 1978). Analyses of responses reported that three of the five organizational variables (conflict, blocked career, and alienation) had significant positive effect on job stress. *Neuroticism* was found to moderate the effects of the three organizational stressors (alienation, work overload, and unfavourable work environment) on job stress.

Chioqueta & Stile (2005) carried out a study on 219 university students to investigate the relationship between personality traits, depression, hopelessness, and suicide ideation. The study used three instruments, namely, *NEO Personality Inventory Revised*, *the Beck Hopelessness Scale* (BHS; Beck et al., 1974), and *Hopkins Symptoms Check List* (HSCL-25; Derogatis et al., 1973). The results indicated that depressive symptoms were positively predicted by *Neuroticism* and *Openness*, and negatively predicted by *Extraversion*. *Hopelessness* was positively predicted by *Neuroticism* and negatively predicted by *Extraversion*. Finally, *Suicide Ideation* was positively predicted by *Neuroticism*. Further, it was found

that depressive symptoms were positively predicted by the *Neuroticism* facets, angry hostility and depression, and negatively predicted by the *Extraversion* facet, positive emotions, and by the *Openness* facet, actions. *Hopelessness* was positively predicted by the *Neuroticism* facet, depression, and negatively predicted by the *Extraversion* facets, assertiveness and positive emotions. Among the *Neuroticism* facets, depression positively predicted *Suicide Ideation*, while self-consciousness negatively predicted *Suicide Ideation*.

Hudek-Knezevic et al. (2006) carried out a study on 214 nurses to examine the role of personality traits, social support and coping styles on burnout. Four instruments were used for data collection, namely *Big Five Inventory* (BFI; Benet-Martinez & John, 1998), *Social Support Appraisal Scale* (SS-A; Vaux et al., 1986), *Coping Orientation to Problems Experienced* (COPE; Carver et al., 1989) and *Maslach Burnout Inventory* (MBI; Maslach & Jackson, 1986). Personality traits were included into the first step of analysis, three sources of social support (co-workers, family and friends support) in the second, and in the third step three coping styles (problem-focused coping, emotion-focused coping and avoidance coping) were included. The results indicated that out of five personality traits, *Neuroticism* positively predicted exhaustion, while *Agreeableness* negatively predicted reduced professional efficacy. As regards three sources of social support, only co-worker support negatively predicted exhaustion as well as reduced professional efficacy. Regarding coping styles examined, only *Avoidance Coping* positively predicted depersonalization.

Grant & Langan-Fox (2006) conducted a research study on 211 middle managers (88 men, and 123 women) to examine the combined/interactive effect of the Big five traits in predicting stress, coping and strain among managers. Five instruments were used to collect the data from the respondents, i.e. *NEO-Five Factor Inventory Form*, *Measures of Subjective Work Environment Stress*, *Brief COPE inventory*, *Occupational Stress Indicator* (OSI) and *OSI-Job Satisfaction Scale* (Cooper et al., 1988). The study reported that low *Neuroticism* with high *Extraversion* & high *Conscientiousness* predicted lower stressor exposure, physical ill health and job dissatisfaction. It was also reported that high *Neuroticism*-low *Conscientiousness* predicted higher stressor exposure,

dysfunctional coping, physical ill-health and job dissatisfaction and lower problem-focused coping. Further, it was indicated that in predicting job dissatisfaction, there was the interactional influence of high *Neuroticism* and low *Agreeableness*.

Krause & Broderick (2006) investigated relationships among personality, locus of control, and current post-injury employment status with spinal cord injury. The sample size of the study was 1,391 participants. Participants with higher internal *Locus of Control* and activity (personality) reported more favorable employment outcomes. Higher scores on chance and powerful others (*Locus of Control*), *Neuroticism*, and *Aggression-Hostility* (personality) were associated with diminished employment outcomes.

Lamb (2009) conducted a study on 187 call centre employees of South Africa to examine the role of personality traits and resilience as predictors of Job Stress and burnout. The instruments used for measurement of variables were *International Personality Item Pool* (IPIP; Goldberg et al., 2006); *The Resilience Scale* (Wagnid & Young, 1993); *Maslach Burnout Inventory*, and the *Experience of Work and Life Circumstances Questionnaire*. The study indicated a linear relationship between job stress and the personality factors, i.e. *Emotional Stability* and *Openness to Experience*. *Conscientiousness* was found to be a valid predictor of the *emotional exhaustion* and *Depersonalization* dimensions of burnout. Resilience, or more specifically acceptance of self and life, was also reported to be a valid predictor of *Depersonalization*. *Conscientiousness*, *Agreeableness*, and *Resilience* were reported to be valid predictors of the personal accomplishment dimension of burnout.

Popoola & Illugbo (2010) conducted a study on 370 female teachers of Osun State teaching service to examine their stress level. It also aimed to determine the relationship between stress and personality traits of self concept, *Extraversion*, *Locus of Control* and *Achievement Motivation*. Five research instruments were used to collect data for the study. These are the *Stress Assessment Inventory* (SAI; Akinboye & Adeyemo, 2002) and four personality inventories namely *Tennessee Self-Concept Scale* (TSCS; Fitts, 1964), *Rotter's Internal-External Locus of Control Scale* (LCS; Rotter, 1966), *Questionnaire Measure of Need Achievement*

(QMNA; Herman, 1970) and *Eysenck Personality Inventory*. The results exhibited that 80.3% of female teachers were experiencing low level of stress. No significant relationship between stress and personality traits of *Extraversion*, *Locus of Control*, *self concept*, and *achievement motivation* was observed. The results also noted that marital status of female teachers significantly influenced the stress experienced by them. Divorced females were reported to experience more stress than those who were either single or married. The study concluded that personality traits were not substantial predictors of the level of stress experienced by female teachers.

Vohma et al. (2010) attempted to identify differences in personality domains and various demographic and clinical variables of panic disorder. The data was collected from 193 patients and 314 matched healthy subjects using *the Swedish university scales of Personality* (SSP; Aluoja et al., 2009). It was revealed that in all personality traits, except for *Detachment* and *Physical Trait Aggression*, significant differences were observed between panic disorder group and healthy subjects. *Neuroticism* and *Aggressiveness*, but not *Extraversion*, were significantly higher in panic disorder group than the healthy group. The study added to the evidence of maladaptive personality disposition in patients with panic disorder in addition to other traits, particularly for high *Neuroticism* and manifest somatic trait anxiety.

Jovanovic et al. (2011) conducted a study on a sample of 260 drivers (137 males, 123 females) to explore the relationship between five-factor of personality and aggressive behavior during driving. Data was collected through three instruments, namely, *UK driving anger scale*, *Driving anger expression inventory*, and *Personality inventory* (NEO-PI-R; Djuric-Jocic et al., 2004). It was hypothesized that *Neuroticism* correlated with aggressive driving indirectly through anger, whereas other four traits were directly connected with aggressive driving. Analysis indicated that *Neuroticism*, *Agreeableness* and *Conscientiousness* predicted driving-related anger and aggression. The relationship between *Neuroticism* and aggressive driving was mediated by the driver's anger, whereas *Agreeableness* and *Conscientiousness* had both a direct and indirect relations with aggressive driving.

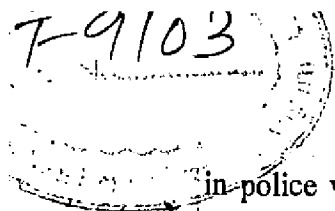
The review of the literature revealed that certain personality traits such as *Neuroticism*, *Anxiety*, *Sensation Seeking*, *Hostility* and *Introversion* could make the individuals more vulnerable to stress while certain personality traits such as *Extraversion*, *Activity*, *Sociability* and *Conscientiousness* could decrease the stress level of the individuals.

The aim of the present research study is to identify the stress level of the police personnel. The next section presents a review of studies focusing on police stress worldwide as also in Indian context.

### **3.4 Studies on Police Stress**

Fairly large literature on police stress had been produced since the mid-1970s. These studies focus on issues like intensity, prevalence, sources, and consequences of stress (Aaron, 2000; He et al., 2005; Laufersweler-Dwyer & Dwyer, 2000; Lee, 2002). Some studies had concentrated on the stress of dealing with dangerous and violent situations or on factors external to the police department (Morash et al., 2008). But, it is also increasingly clear that work place problems including negative relationships with co-workers & superiors, opportunities to determine one's job activities and for promotion have also been related to stress in some settings (Brown et al., 1996; Crank et al., 1995; Hurrell, 1995; Juniper, 1996; Kirkcaldy et al., 1995). Coman & Evans (1991) observed that because of the pervasiveness of these factors in police organizations, organizational sources of stress are particularly important to them. Brooks & Piquero (1998) also noted that problems in the police organization are more predictive of stress than are other types of possible stressors. Finally, Zhao et al. (2000) noted that police officers' perceptions of their work environment had a significant impact on multiple measures of stress.

Police work generates its own unique stresses. Symonds (1970) proposed two general areas of job strain in police-*vocation* i.e. pressure resulting from the unique responsibilities of law enforcement and *tension* arising from the organizational aspects of policing. Stressors which had been considered inherent to police work include physically or psychologically threatening events, such as in-progress felony calls, physical attacks, high speed chases, and the death or injury of another police officer (Violanti & Aron, 1993). Organizational stressors



in police work had been related to policies, procedures, shift work, poor or no equipment and inadequate support mechanisms from superiors (Kroes et al., 1974; Violanti & Aron, 1994). Spielberger et al. (1981) suggested negative encounters with the public, courts and media as organizational pressures and psychological threats (Ursitti, 2011).

In comparison to other occupations, police work has been identified as one of society's most stressful occupations (Alexander, 1999; Anshel, 2000). The exposure to these stressful conditions could lead to ill health of police officers. It is important to have a productive and healthy police service that serves as an important contributor to the stability and economic growth of a country. Thus, it is necessary to investigate possible factors that contribute to work-related well being of the police officers (Mostert & Rothmann, 2006).

In order to compare the results from India as well as outside India, the review is categorized in two parts-International studies on police stress and Indian studies on police stress.

#### **3.4.1 International Studies**

Police research has received considerable emphasis worldwide. The section presents a review of such studies:

Some occupations such as police work had historically required shift work (Violanti et al., 2008). Shift work requires a rearrangement of awake & sleep time. This could lead to disruption of circadian rhythm, which in turn causes internal de-synchronization and subsequent psychological and physiological disturbances (Violanti et al., 2008). Gerber et al. (2010) surveyed 460 police officers to examine how shift system contributed to stress and sleep pattern. The data was collected through *Shift vs. Non-Shift Work Questionnaire* viz. *Trier Inventory for the Assessment of Chronic Stress* (TICS; Schulz et al., 2003), *Pittsburgh Sleep Quality Index*, and *Short form Health Survey* (SF-12; Bullinger & Kirchberger, 1998). MANCOVA was performed to test the differences in the dependent variables. Shift work was associated with increased social stress, work discontent and sleep complaints. Stress was found associated with increased sleep complaints and lower scores in perceived health.

Mostert & Rothmann (2006) carried out a study on 1,794 South African police officers to assess whether background variables, i.e. job stress, and personality traits could predict the work related well being (burnout and work engagement) of police personnel. The instruments used were *Maslach Burnout Inventory- General Survey* (MBI-GS) (Schaufeli et al., 1996), *the Utrecht Work Engagement Scale* (UWES) (Schaufeli et al., 2002), *the Police Stress Inventory* (PSI) (Pienaar & Rothmann, 2003) and *Personality Characteristics Inventory* (PCI) (Mount and Barrick, 2002). The results indicated that age, gender and race explained a small percentage of the variance in exhaustion, cynicism and vigor/dedication. Stress arising out of job demands and lack of resources predicted exhaustion and cynicism. *Emotional Stability* and *Conscientiousness* inversely predicted *Exhaustion* and *Cynicism*, while *Emotional Stability*, *Conscientiousness* and *Extraversion* predicted vigor and dedication. Stress arising out of job demands predicted only a small percentage of the variance in vigor and dedication.

Shane (2010) carried out a survey on 461 police officers and examined the impact of organizational stressors on police performance on two large urban police departments in Michigan and New Jersey. *Police Stress Questionnaire* (PSQ; McCreary & Thompson, 2006) was used in the survey. The results reported that performance decreased as perceived stressors increased. It was also observed that organizational stressors were significantly different from operational stressors.

Kohan & Mazmanian (2011) carried out a study on 199 police officers of three police departments to identify the nature of the police work, burnout, and pro-organizational behavior. The questionnaire used were *The Police Daily Hassles and Uplifts scales* (PDHS and PDUS; Hart et al., 1993; 1994), *Maslach Burnout Inventory*, *Organizational citizenship behavior*, *Revised way of Coping checklist* (WCCL; Folkman & Lazarus, 1985), *Positive and Negative Affect Schedule* (PANAS; Watson et al., 1988), and *Social Desirability Scale* (SDS; Crowne & Marlowe, 1960). Findings indicated that appraisal of negative experiences depended on the frequency of exposure to the different facets of work whereas positive organizational experiences were perceived as being more uplifting than operational ones. Burnout and OCB were more strongly associated with organizational experiences than with other operational experiences.



The events and situations experienced in police work have generally been described in four categories- *organizational practices & characteristics; criminal justice practices & characteristics; public practices & characteristics* and *police work itself* (Fain & McCormick, 1988; Territo & Vetter, 1981). Other studies based on officers' perceptions, grouped these factors in two categories; *the stressors stemming from organizational factors* and those *rooted in the nature of police work* (Morash et al., 2006). The first group, rather than the latter one has emerged as more effective in determining the level of stress among police officers (Morash et al., 2006; Buker & Wiecko, 2007). Stressors rooted in organizations typically relate to *administrative policies and attitudes that were bothersome to officers* (Violanti & Aron, 1995). These stressors may be *supervision (management) practices, promotion practices* and *work conditions* (Storch & Panzarella, 1996). More specifically, these stressors included lack of participation in decisions affecting daily organizational practices; *lack of administrative support; a punishment centered philosophy or unfair discipline* and alienation among police officers resulting from the quasi-militaristic nature of the organization (Buker & Wiecko, 2007). On the other hand, nature of police work, as a stressor had also been problematic but it was not severe. For instance, police officers rarely mentioned danger, violence or human misery as source of stress in their work environment, as long as questionnaires did not specifically ask about the existence or the extent of these factors (Storch & Panzarella, 1996). Threats of physical harm and exposure to violence were not common for many small-sized police departments. Police officers therefore, might be describing their work as being more dangerous than it actually is (Buker & Wiecko, 2007).

Storch & Panzarella (1996) stated that *it is undeniable that police work includes moments of very high stress, even terror, but these moments are rare*. They further expounded that most workdays passed without dramatic events; however, when these significant events did occur, they were often experienced as *Eustress*, as positive stressors, by officers who enjoyed the excitement of the job. The statement was supported by one study carried out by Newman and Ruckel-Reed in USA (2004). They undertook an anonymous survey of 100 Deputy U.S. Marshals by asking open-ended questions and also by *State Trait Anxiety Questionnaire*

(Spielberger et al., 1983). The respondents scored low on the State Trait Anxiety Inventory. The main stressors identified by the respondents were related to organizational variables, such as, *problems with management*, *bad bosses*, and *work environment*. More stress was experienced by deputies who were inclined to think about job-related illnesses or being injured while duty, those who were facing retirement, and those who disliked their current assignments.

Buker & Wiecko (2007) conducted a study on 812 police officers of Turkish National Police to assess the effects of commonly explained police stressors' on the members of a developing country's centralized police department. The data was collected through *Brief Symptom Inventory* (BSI) (Derogatis & Melisaratos, 1983); *Job Diagnostic Survey* (JDS; Hackman & Oldham, 1980) and *Job Satisfaction Scale* (Smith et al., 1969). This study indicated that organizational issues were the most important sources of stress in policing. It was also reported that several police stressors, as observed for local police departments, might not have the same effects for larger, centralized police departments.

Lack of employee commitment to the organization is one of the negative consequences of stress. Two different approaches of defining organizational commitment reported in the literature were an *employee's intention to continue employment in an organization* (Meyer & Allen, 1997) and an attitude in the form of an attachment between the individual and the organization that was reflected in the relative strength of an *employee's psychological identification and involvement with the organization*. Jaramillo et al. (2005) collected the responses of 150 police personnel to comprehensively investigate the effects of police stress (internal to the organization) on organizational commitment. Results indicated that, in addition to job satisfaction, *supervisor's support*, *group cohesiveness* and *promotion opportunities* were the best predictors of *Organizational Commitment* among law enforcement officers. The results also indicated a significant relationship between organizational commitment and intention to leave.

It is believed that suicide is a leading cause of death among police officers (Janik & Kravitz, 1994) and that policing, as an occupational group is dangerous, stressful and associated with high levels of suicide (Hill & Clawson, 1988). Burke & Mikkelsen (2007) carried out a study on 766 police officers of Norway to

examine potential predictors of suicide ideation among them. The data was collected through several questionnaire, namely, *Copenhagen Psychological Questionnaire* (COPSOC; Kristensen & Borg, 2001); *Maslach Burnout Inventory-General Survey* (MBI-GS; Schaufeli et al., 1996) and *Suicidal Ideation Scale* (Paykel et al., 1974). It was observed that unmarried police officers, officers reporting higher levels of both *Exhaustion* and *Cynicism*, and officers engaged in less active coping and officers reporting lower level of social support indicated more suicidal ideation.

Kop et al. (1999) studied a sample of 358 Dutch police officers to understand the stressors in police work and to investigate the relationship between burnout and the attitude of officers towards violence. Data was collected through a self-report questionnaire and *Maslach Burnout Inventory*. The results indicated that organizational stressors were more prevalent than task-related stressors. Police officers often felt *poor management, reorganization, bureaucratic interference, administration, shift work*, bureaucracy and unmotivated colleagues. Police officers reported low level of emotional exhaustion. The study also noted a relationship between lack of reciprocity at interpersonal and organizational levels and higher levels of burnout. Further, the study observed a relationship between burnout and the use of self-reported violence.

Myendeki (2008) conducted a study on 89 (58 males, 29 females) police officers to assess whether coping strategies used by police officers helped them to moderate the outcome of burnout resulting from job stress. *The Maslach Burnout Inventory – General Survey, Police Stress Inventory* and *COPE* (Carver et al., 1989) questionnaire were administered. Results indicated that when Lack of Resources existed, police officers adopted *Avoidance Coping* (COPE) as a strategy, which led to the experience of Exhaustion. Results also indicated that police officers used Active Coping, Cognitive Coping and Turning to Religion as means of moderating the stress-burnout relationship. Results also indicated that the Avoidance Coping, used by male police officers led to *Cynicism*. When female police officers experienced Job Demands and a Lack of Resources they used Seeking Emotional Support as a coping strategy. Male police officers used Active Coping as a strategy to regulate the stress-burnout relationship while female

police officers adopted *Active Coping* and *Turning to Religion* to moderate the effects of job stress and burnout.

Agolla (2009) collected data from the sample of 229 police officers of Bostwana to identify the potent stressors in police job. The questionnaire was developed by the researchers themselves for this particular study. The study reported that police officers of Bostwana police department were under high level of stress. The most potent stressors for police officers were identified as injuries while on duty, use force when job demands, work overload and inadequate resources. The perceived police stress symptoms identified were *feeling of restlessness, trouble in concentrating, worries and thinking of concerns at night and weekend, feeling tensed and anxiety, feeling of depressed, increase in appetite, loss of personal enjoyment and feeling of lack of energy*. The coping strategies used by police officers were identified as exercising, socializing, healthy eating or diets, career planning and employee training.

Chueh et al. (2011) carried out a study on 698 male police officers to understand the association between the severity of psychosomatic symptoms and perceived work stress among male police officers in southern Taiwan. The results of multiple regression analysis reported that the police officers who perceived high-work stress reported more severe psychosomatic symptoms than those who perceived low-work stress and perceived social support had a moderating effect on the association between severity of psychosomatic symptoms and perceived work stress.

Komarovskaya et al. (2011) examined the relationship between killing or seriously injuring someone in the line of duty and mental health symptoms in a sample of 400 police officers. It was reported that killing or seriously injuring someone in the line of duty was significantly associated with PTSD symptoms and marginally associated with depression symptoms.

The review of literature revealed that major stressors for police personnel are both job related and organizational related. The job related stressors are routine job demands, work overload, exposure to crises, physical attacks, death or injury of fellow police officer and negative encounter with public, court as well as with media. The organizational stressors for police are negative work environment,

negative relationship with coworkers and seniors, lack of promotion, unfair discipline practices, bureaucratic interference and shift work. While comparing severity of job related and organizational related stressors among police personnel, organization specific stressors are found more prominent among police personnel. The next section presents the review of studies related to police stress carried out in Indian context.

### **3.4.2 Indian Studies**

In comparison to other countries, limited studies on police stress have been carried out in India. With the growing focus on the role of police in a changing democratic society, some police officers began to show interest in the problems of job stress in policemen (Mathur, 1989). Some pioneering work on the subject has been carried out by Bhaskar (1986), Mathur (1993, 1994, 1995), Kalia (1995), Channa Basavanna et al. (1996), Talib (1999), Chakraborty (2002) and Verma (2005). These studies are perused below:

Dangwal & Gangopadhyaya (1982) carried out a study to understand the relationship between alienation and stress among subordinate ranks of police. They observed positive relationship between alienation and stress. Police Inspectors in the age group 31-40 years emerged as the most stressed age group. It was also reported that higher the educational qualification, higher the stress level. Bhaskar's study (1986) appears to be the first Indian doctoral thesis on police stress. She examined the relationship of personality factors and job stress among 390 male Delhi police officers from different ranks. Factors intrinsic to job and relationship at work were found to be the most dominant contributors to stress. Personal and family background variables such as age, educational qualification, salary, length of experience, number of years in the present position, marital status, size of family etc. were reported to play a significant role in the perception of job stress. She also found that personality factors had a significant role in the perception of job stress.

Pillai (1987) undertook a study on a sample of 2,015 persons including both police personnel and their wives in his sample. The sample comprised 1208 police constables, 332 head constables, 83 Police Sub Inspectors, 10 Police Inspectors and 382 wives of police personnel in Ahmedabad city. It was reported that

40.65% of the subjects were experiencing stress disorders. Head constables reported highest stress followed by wives of police personnel. Smoking as a symptom of stress was reported to be higher among constables, followed by head constables and Police Sub Inspectors.

Suresh (1992) carried out a study on subordinate officers to understand the relationship among police stress, personality and burnout in Madras police. The sample included women police also. The analysis reported a positive relationship between stress and burnout. Young officers (25-35 years) reported less stress in job events pertaining to routine stress than the middle aged (36-42 years) officers. Superiors reported more stress than subordinates. An increase in age was accompanied by increase in burnout. Officers with an experience of 12-20 years in police reported routine stress to be more stressful than those with lesser experience (2-11 years). No significant correlation was found between *Type A personality* and perceived stress.

While carrying out a study on CRPF and BSF police personnel, Mathur (1994) noted that specific police stressors for Indian police were work conditions, work overload, lack of recognition, fear of severe injury or being killed on duty, inadequate equipment, shooting someone in line of duty, Anti terrorist operations, confrontation with public, lack of job satisfaction and Police hierarchy. Tripathi et al. (1993) examined the nature of stress encountered by police personnel. Data was collected from 226 police personnel of four districts of Uttar Pradesh, namely *Allahabad, Fatehpur, Pratapgarh and Kanpur*. Major stressors identified in this study were *atmosphere of mistrust at all levels, negative public image, negative self image*, increased incidence of stressful life events and daily hassles, *indication of idealizing suicide* and depressive problems, negative health outcomes due to style characterized by hostility, maladjustment and unhappiness among frustrations and feelings of guilt, non grant of leave, inadequate housing / security for the family, irregular work hours, inadequate provisions for children's education, lack of medical services, inconsistent policies regarding performance evaluation, accountability, promotion and transfer and insensitive handling of personnel.

In an exploratory study, Mathur (1993) studied organizational role stress among 30 police professionals. *Role erosion, Self Role Distance, Inter Role Distance* and *Role Stagnation* emerged as the potent stressors in this study. The total role stress was also observed high. In a more comprehensive study, Mathur (1995) investigated the level of awareness of stress among police personnel. A group of 71 Gazetted officers and 81 Non-Gazetted police personnel from 16 different states and central police organizations were included in the sample. The respondents were administered a police specific questionnaire designed for this study. The survey substantiated the fact that both the groups experienced job related stress. Major stressors faced by Gazetted officers were *suppression, suspension, departmental enquiry, death/sever injury to colleague, arresting criminals, use of weapons, carrying out anti-terrorist operation* etc. while subordinate police personnel were stressed due to suspension, carrying out anti-terrorist operation, personal injury/illness, facing departmental inquiry, *staying away from family, financial crisis*, death/sever injury to colleague in line of duty, use of weapon, development of disease etc.

Channa Basavanna et al. (1996) collected data from 2,354 police personnel belonging to various ranks in order to identify the psychiatric morbidity and the various factors contributing to their mental health problems. Data was collected from police personnel of various ranks from Bangalore, Hubli and Delhi. This study, undertaken at the behest of Bureau of Police Research and Development, comprehensively brought to the surface the problem of stress among police personnel. It was reported that 52% of Delhi's policemen were not staying with family. Majority of policemen reported to work for more than 12 hours per day without any leave during the week. The major stressors reported were *too much responsibility, lack of time, conflicting orders, inherent incapability, no time for family, lack of resources for work executions, unpredictable role in the department*. Physical illness too emerged as a major problem in this sample. On clinical examination, 47% in Hubli, 37% in Bangalore and 52% in Delhi were reported to be suffering from mental disorders. On self report depression, dysthymia and anxiety emerged common ailments among police personnel.

Singhvi & Mathur (1997) conducted a study among a group of CRPF officers including 19 gazetted officers of the rank of Deputy Superintendent of Police and a group of 32 Non-Gazetted Officers. *Role Erosion* and *Inter Role Distance* were reported to be most dominant whereas *Role Ambiguity* and *Role Overload* were reported to be the least dominant contributors of role stress for the total sample.

Talib (1999) carried out on a study on 178 police personnel to investigate the role stress among police personnel. The data comprised two groups of police personnel viz. civil police and PAC personnel. The study revealed that *Inter Role Distance*, *Resource Inadequacy* and *Role Erosion* were the dominant stressors for the police personnel. More than 42% respondents were reported either medium high or high stress level. The data analysis also resulted that respondents at subordinate level scored significantly higher on total stress than officers. The study demonstrated that PAC was the more stressed group than civil police.

Dhaliwal (2003) pointed out that most of the police personnel of India were overburdened with work and had to stay away from their families and children for long periods which often led to family problems and disputes. Inability to handle domestic tension and job related stress might translate into rude behavior on duty. It was reported that officers treat their subordinates in a *shabby* and insulting manner which was also a cause of stress among them.

Kumar (2006) investigated the stress profiles of police personnel posted in the police stations in Hyderabad. The major stressors affecting the life of police personnel were *insufficient time for family*, *work overload*, *accommodation problem*, lack of confidence of superiors, no time for intellectual development, recreation, *to keep everyone satisfied*, *risky situations*, problem of job coordination, lack of clarity in expectation and coping with superiors.

Deb et al. (2006) carried out a study on 60 Traffic police officers and 68 constables from *Kolkata* police to identify stress among them. The analysis revealed that traffic constables were experiencing more stress than traffic police officers. Police officers were reported stress due to role overload, responsibility for persons, unprofitability and strenuous working conditions while constables were stressed due to under participation, *powerlessness*, *responsibility for person* and *Role Overload*.



Nagar (2009) surveyed sixty police personnel belonging to three hierarchical level of police organization (CSP, Inspector and Constables) during a soft skill training session to explore the occupational stress and health of the police personnel. Results revealed that 40% constables, 20% inspectors and 10% CSPs were experiencing high level of occupational stress. The common health complains reported by police personnel were high blood pressure, diabetes, Sciatica, arthritis, migraine, asthma and Gastric problems.

Saha et al. (2010) conducted a study on police personnel of *West Bengal* to examine the cardiovascular status of police officers. It was observed that police officers experienced higher cardiovascular risk factors than the general population. Body mass index, blood pressure, cholesterol, triglyceride, High-density lipoprotein were higher in police personnel than non-police population.

Rani & Garg (2010) surveyed 128 police personnel to understand the relationship between burnout and marital adjustment. The findings reported a partial negative correlation between marital adjustment and burnout. *Emotional Exhaustion* and *Depersonalization* had a negative relationship with marital adjustment while personal accomplishment had a positive relationship with marital adjustment. The findings reported no significant difference in burnout across gender. On the other hand, male police officers were found to have low marital adjustment than females. Constables reported more marital adjustment than sub inspectors.

Selokar et al. (2011) carried out a study on 102 police personnel of *Wardha* city to identify occupational stress. Data was collected through *The Professional Life Stress Test*. The major stressors identified in the study were *criticism by superiors*, *excess work*, *no rewards*, inadequate values given to abilities and commitments and no satisfaction from work. Female police personnel reported higher stress and mental illness than males.

Bano (2011) undertook a study on 65 police personnel of Aligarh to identify major stressors among them. Findings reported that *political pressure*, *lack of time for family*, *negative public image* and low salary were the primary causes of stress among police personnel. It also emerged that stress was significantly more pronounced among those police personnel who were younger, more educated, posted in rural areas and had less work experience.

The review of related studies on police stress revealed that political pressure, lack of time for family, negative public image, inadequate salary, work overload, death/injury of fellow officer on duty, negative relationship at workplace, lack of promotions, time/job pressure etc. are major stressors for police personnel. The next section presents the literature review related to police personality.

### **3.5 Studies on Police Personality**

Personality is the entire spectrum of characteristics representative of an individual (Ursitti, 2011). Personality encompasses values, motives, and behaviors that forge a unique composite of a person (Sigelman & Rider, 2003). One assumption that has been explored in the literature is that police officers have a distinct personality (Lefkowitz, 1975). Do police personnel possess certain personality dispositions that make them unique compared to other population? This question had been the subject off an extensive line of research (Bano & Talib, 2012). Empirical research overall had been inconclusive about the origin or dominance of particular traits in the police population, although several characteristics consistently had illustrated the police personality, including *Hypervigilance*, *Suspiciousness*, *Alienation*, *Cynicism*, and *Authoritarianism* (Symonds, 1970). Limited empirical data is available to elucidate qualities and characteristics of police officers prior to entry into law enforcement. Police officers generally had been portrayed from working class backgrounds, attracted to the career because of the salary, benefits, and pension, which satisfy a value of security (Symonds, 1970; Niederhoffer, 1967). Many police officers have also expressed an ardent desire to serve, protect, and help others, indicating altruism as a shared motive among the group (Reiser, 1974a; Symonds, 1970). Others have intimated a sense of adventurousness as the compelling reason they sought out police work (Storch & Panzarella, 1996).

Police agencies were expected to select those individuals who believed to possess the strongest physical, intellectual, and moral qualities. Symonds (1970) noted that many individuals who excel in these specific domains, regardless of occupation, tended to have developed rapidly and display certain qualities. He stated that in my studies of young people of all economic classes, men who exhibit the above traits seem to have sidestepped the adolescent process and have gone *from childhood directly to adulthood*. They tend to be conservative and

security bound. They are uncomfortable with rebellion and all forms of dramatic adolescent protest. These young men are idealistic, and have preserved an attitude towards authority that is one of respect, awe and, sometimes, reverence. They cannot understand, accept or tolerate any direct challenge of authority. They experience challenge as abuse and defiance.

While Symonds' work limited itself to males, it suggested several dominant characteristics of law enforcement personnel. Violanti (2003) submitted that police socialization was a significant factor in police personality, and that once officers were ingrained into the police role, a range of cognitive and behavioral shifts occur. *Hypervigilance* had been recognized as one response inculcated into police recruits, and practiced and maintained throughout the careers of most officers (Gilmartin, 2002; Hillgren & Bond, 1975). *Hypervigilance* is an elevated state of awareness in which person is steadily attuned to potential threats and unusual activity in an environment. Police officers whose lives depend on the ability to detect danger essentially must adopt a worldview in which people and situations are perceived as suspicious. This perspective was believed to influence police officers on and off duty, and to catalyze other frequently identified characteristics of the police personality, such as suspiciousness, isolation, and cynicism. Empirical conclusions about the onset of suspiciousness in police officers had remained inconclusive (Lefkowitz, 1975), though the link of *hypervigilance* to other perceived police traits was discussed in the literature.

Gilmartin (2002) and Violanti (2003) noted that the physiological repercussions of *Hypervigilance* prompted police officers to detachment or withdrawal outside their police role. These arguments mentioned that the high energy phase of the *hypervigilance* cycle biologically required a subsequent, lower phase of intensity for officers to recharge and revitalize. Police officers who were physiologically addicted to the high energy associated with *hypervigilance* respond to the low feelings at the bottom of the cycle by avoiding time at home so as to avert the renewal experience, or by staying physically present but mentally detached from activities with family and friends. Withdrawal and detachment intersect with another police characteristic identified in the literature i.e. *Isolation*.

*Isolation* as a characteristic of police officers had been attributed to factors other than the lower phase of *Hypervigilance*. Skolnick (1993) observed that police officers, wary of people and situations as part of their occupational mindset, were themselves perceived by society as suspicious individuals because of the dangerous work they perform and the authoritative role they assume. Lefkowitz (1975) asserted that in spite of this professional unity, police were as suspicious of one another as of civilians. Others had mentioned that support and identification with colleagues enabled officers to withstand the outside pressures of law enforcement and instills a sense of certainty and morale that countered public opposition (Kroes et al., 1974; Reiser, 1974a).

Another quality conceptualized in the police personality is *Cynicism*, which Hillgren & Bond (1975) asserted officers might acquire for purposes of *Self-preservation*. *Cynicism*, much like suspiciousness, had appeared to manifest in police officers as a result of the police socialization process and had maintained itself in police culture via cohesive relationships with peers (Hillgren & Bond; Niederhoffer, 1967). Niederhoffer proposed two categories of police cynicism—one directed toward the public, and the other, at the police organization.

According to Niederhoffer (1967), *Cynicism* requires a person to draw certain conclusions about circumstances. For police officers, these inferences often were taken from continual negative encounters with individuals and situations on the streets and in police administration. Yet despite these circumstances, some police professionals acknowledged flaws and still believed that it was possible to change and improve the system. Lefkowitz (1975) noted that while *Cynicism* appeared to be a prevailing characteristic in the police population, this conclusion had lacked supporting evidence. Research that had determined a relationship between *Cynicism* and the police force had been disputed because of methodological limitations.

Literature suggests an interrelationship among many of the traits perceived in police officers (Lefkowitz, 1975; Niederhoffer, 1967; Skolnick, 1993). *Authoritarianism*, a trait is closely related to *Cynicism*, *Suspiciousness*, *Solidarity* and *Social Isolation*. *Authoritarianism* had been understood as an amalgamation of several qualities, including cynicism, conventionalism, black-or-white thinking,

and suspicion (Neiderhoffer). Symonds (1970) posited conservatism as a preexisting tendency in police officers. Studies that have focused on police *Authoritarianism* have yielded contradictory findings.

Despite varying conclusions, literature establishes the traditional societal view of police officers as authoritarian figures (Reiser, 1974b; Skolnick, 1993). The power and control that police wield, symbolically via uniform and equipment, and literally with the extent of legal jurisdiction, could prompt conflicted responses from individuals (Reiser, 1974b). Niederhoffer (1967) captured the range of latent and overt emotion that could be triggered by the perception of police as authority figures. The policeman is a 'Rorschach' in uniform as he patrols his beat. His occupational accouterments – *shield, nightstick, gun, and summons book* – clothe him in a mantle of symbolism that stimulates fantasy and projection. Children identify with him in the perennial game of *cops and robbers*. Teen-agers in autos stiffen with compulsive rage or anxiety at the sight of the patrol car. To people in trouble the police officer is a savior. In another metamorphosis the patrolman becomes a *fierce ogre* that mothers conjure up to frighten their disobedient youngsters. *At one moment the policeman is hero, the next, monster* (Niederhoffer, 1967).

The characterization of police as *John Wayne* (Reiser, 1974a, 1974b) and superhuman (Violanti, 2003) additionally had reflected the gamut of perceptions about the police personality. This summary of police personality traits by no means accounts for all police officers, and it must be noted that much of the police literature has focused almost exclusively on male officers. The analysis, however, has provided context for police stress following the stream of occupational stress literature which has emphasized personality as one of two antecedent factors of stress. The second factor, characteristics of the organization, must also be explored. The next and final section of the chapter presents the studies carried out on personality and stress among police personnel.

### **3.6. Studies on Personality, Stress and Police**

Berg et al. (2005) carried on a study on 3,272 Norwegian police of all hierarchical levels to assess the most severe and frequent stressors for police personnel. They also aimed to study stress in relation to personality traits, work locus and control

and coping strategies. The data was collected through *Norwegian Police Stress Survey* (NPSS; Spielberger et al., 1981); *Job Stress Survey* (Spielberger et al., 1999); the *Basic Characteristic Inventory*, the *Work Locus of Control Scale* (WLCS; Spector, 1988); and the *Coping Strategies Scale*. Multivariate regression analysis was used. It was reported that work injuries were the most potent stressor but least frequent stressor. On the other hand, job pressure was reported as the least severe but most frequent stressor for police personnel. Females experienced less stress than males. Older police officers reported more job pressure severity and fewer work injuries. The correlations between personality traits, work locus of control and coping were moderate. The trait *Neuroticism* was associated with higher score for severity and lower levels of frequency. On the other hand, *Extraversion* indicated opposite results i.e. low score for severity and high level of frequency. Negative correlation was reported between *Neuroticism* and the stress frequency.

Jonker (2005) carried out a study on 2,153 police officials to assess the relationship among burnout, job stress and personality traits in the South African Police Service (SAPS). The responses were collected using *Maslach Burnout Inventory-General Survey* (MBI-GS), *Police Stress Indicator* (PSI) and *Personality Characteristics Inventory* (PCI). The results indicated that burnout was significantly related to job stress and personality traits. Job stress and personality traits were found also significantly correlated. Results reported that *Exhaustion* was best predicted by stress due to job demands, lack of resources, *Introversion*, *low Conscientiousness* and *low Emotional Stability*. *Cynicism* was best predicted by stress because of job demands, lack of resources, police demands, *low Emotional Stability* and *low Conscientiousness*. Professional efficacy was best predicted by low job stress, *Emotional Stability*, *Agreeableness* and *Conscientiousness*.

Lau et al. (2006) carried out a study to understand the relationship among personality types, coping and stress among Norwegian police personnel. They surveyed 3,272 police personnel of all ranks, administering a short form of the *Basic Character Inventory*, *Job Stress Survey* and *Coping Strategies Scale*. The study combined the three personality traits of *Neuroticism*, *Extraversion* and

*Conscientiousness* into eight personality types, namely- *spectator, insecure, sceptic, brooder, hedonist, impulsive, entrepreneur* and *complicated*. The results indicated that entrepreneur and hedonist personality types, characterized by a combination of high values on *Extraversion* and low values on *Neuroticism*, reported lower values on perceived stress compared to others, whereas the insecure and brooder types, which combined low *Extraversion* with high values on *Neuroticism*, reported higher levels on perceived stress. Further, the entrepreneur and complicated types reported higher values on active coping strategies, whereas those combining low *Extraversion* and low *Conscientiousness* reported either less control coping (the insecure type), or support coping (the spectator type).

Piemaar et al. (2007) conducted a study on 1,794 police personnel of South Africa to understand the relationship among occupational stress, personality traits, coping strategies and suicide ideation. It was reported that job demands were higher in the high suicide ideation group than in low suicide ideation group. The analysis indicated that suicide ideation was best predicted by three coping strategies namely- low *Approach Coping*, high *Avoidance Coping*, and low turning to religion. *Suicide Ideation* was also best predicted by two personality dimensions namely- low *Emotional Stability* and low *Conscientiousness*.

Chauhan & Desai (2010) conducted a study on 456 police personnel selected from urban and rural areas of Rajkot district to assess the role of personality as moderator variable in relationship between occupational stress and psychological well being. The data was collected through *Zuckerman's Sensation Seeking Scale*, *Srivastava and Singh's Occupational Stress Scale* and *Bhogle's Psychological well-being scale*. Results indicated a significant and inverse correlation between occupational stress and psychological well-being of police personnel. Results also noted that *Sensation Seeking* had significant moderating impact on psychological well-being of police personnel.

On the basis of the review of these studies it can be deduced that police personnel are experiencing high level of stress across the world. Police personnel are the organs of government. Their performance is crucial for ensuring peace and stability in the society. Review of research on police stress indicates that the

problem of stress is a severe one. It could act as a deterrent to effective job performance. The literature review also indicates that personality traits have a *direct relationship with stress level of police. Personality traits could render an individual more susceptible to the effects of stress and it can also decrease the negative emotions.* The next section presents the research gaps identified on the basis of extensive review of literature.

### **3.7 Research Gaps**

Literature review perused above helps identify certain research gaps. The major research gaps are listed below:

- Limited research studies have been carried out on police stress in Indian context.
- There are some studies which carried out to examine role stress among Indian police personnel but they have limitations of sample size and longitudinal spread.
- There is need for more police specific studies using standard and open ended questionnaires so that the problem of stress could be understood in the larger context of occupational stress.
- Limited research work has been carried out exploring the relationship between personality traits and stress among police personnel in Indian context.
- Up to the best of author's knowledge no study has been carried out using the ZKPQ-50-CC for examining personality traits and ORS for measuring role stress simultaneously for police personnel worldwide.

It establishes the need for further research in general. There is a need to explore the phenomenon in Indian context. This is expected to ensure an effective police system that forms the bedrock of peace and stability in the society.



*Chapter – 4*  
*Research*  
*Methodology*

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## Chapter 4: Research Methodology

This chapter describes the research process and research design. It begins with the problem statement, objectives and hypotheses. It details the sampling and data collection method including pattern of data analysis employed. It also describes the process of refinement of ORS and ZKPQ-50-CC scale for present study.

### 4.1 The Problem

Police is one of the most prominent organs of the society. Police personnel are the most visible representatives of the government. They are needed in the society at the time of any danger, crisis and difficulty. Hence they are expected to be more accessible, interactive, responsive and dynamic organization of any society. Naturally, the duty and functions of police personnel are varied, multifarious and interesting. At the same time, the job of police personnel is complicated, elusive, problematic and complex. Primary functions of the Police are mainly to *prevent the crime and maintenance of law and order*. Peace and order are essential requisites for development of any country. Thus, police plays a vital role in country's development. It detects, fights, arrests and controls the enemies of peace and public order.

The society is on the process of transformation. As society is dynamic, it keeps moving and changing continuously for better and worse. The changes in the society take place in the political, economical, cultural, scientific, legal and environment arenas. The society has witnessed the changes on account of crime also. The society is increasingly getting criminalized. In a recent yearly publication of *National Crime Record Bureau* for the year 2011 reported that crime in India has increased by 4.5 percent in one year. In year 2011 a total of 23, 25,575 crimes were reported under Indian Penal Code against 22, 24, 831 cases in the year 2010. Crimes in the country are getting varied. Traditional crimes include drug trafficking, gunrunning, money laundering, extortion, murder for hire, rape, human trafficking, poaching. Many criminal operations engage in black marketeering, political violence, religiously motivated violence, terrorism, and abduction. There are some property related crimes, such as, burglary, theft, motor vehicle theft, corruption and arson. These traditional crimes are termed as *Blue-Collar Crimes*. Then, a new category of crime, *White Collar Crimes*, emerged.

These crimes are committed by a person of respectability and high social status. White collar crimes are committed just for thrill of it. These crimes include *fraud, bribery, insider trading, embezzlement, computer crime, copyright infringement, money laundering, identity theft and forgery*. These white collar criminals are more powerful and have network of relationships to protect them from the law. In addition to it, police personnel are exposed to various threats from criminals.

Unfortunately, when faced with challenges, police today suffers from the problem of *negative public image* and *non-cooperation from the public*. Police personnel are believed to be rude, brutal and deviant. In fact, the majority of complaints received by the *National Human Rights Commission* (NHRC) are against police personnel. Even the official statistics indicate that the number of public complaints against the police received by police departments is very high. Police personnel are also viewed as the agent of political corruption.

Although numerous Incidents of brutality, extortion and other crimes committed by police in different parts of the country are reported in Indian media and public at large, there is so little understanding of pressures and demands in which police personnel operate. The brutality of the police may be the result of the deeper malaise afflicting the policing. There seems to be limited effort to probe deeper and analyze the factors that have led the police to this state of affairs. There is a need for further exploration of this phenomenon. The first major purpose of the present study is to study the reasons for the errant behavior of police personnel with a view to enhancing awareness among police personnel, administrators and general public.

Individuals appear to respond differently to their environments (Mostert, 2006). Personality influences both health related and everyday behaviors, and is also related to an individual's appraisal of stressful experience (Booth-Kewley & Vickers, 1994; Wu & Chan, 2003). A stressful situation may be threat for one individual and at the same time, it may be opportunity for the other individual. Indeed personality traits account for approximately 10% of the variance in an individual's behavior (Burger, 2008). Therefore, personality traits may affect the stress level of the police personnel. In the research context, it has been noted that the relationship between personality and stress has generally been ignored

(Hochwalder, 2006; Maslach, 1993). Limited research is available examining the relationship between personality traits and role stress in Indian police personnel. The second key purpose of the present study is to identify the impact of the personality traits on the organizational role stress of the police personnel. The present study attempts to answer these two major questions.

#### **4.2 Objectives**

This study attempts to understand personality traits of police personnel and role stress amongst them. Police personnel are encountered with two types of stressors. One group of stressors is common to other professional groups. Still, a number of stressors are peculiar to policing occupation. Similarly, some personality traits are unique to police personnel. The study aims to understand and describe the reality of stress, among police personnel. The study also aims to identify the influence of personality traits on the level of stress among police personnel. Specifically, the study is intended to:

- to investigate the nature and dynamics of the role stress among police personnel
- to identify specific stressors causing stress among police personnel
- to assess the personality traits among police personnel
- to explore the relationship of personality traits and role stress among police personnel
- exploring differences, if any, in the quantum and type of stress between civil and state armed police
- exploring differences, if any, in the personality traits between civil and state armed police
- exploring the difference, if any, in the quantum and type of stress among Police Personnel across occupational groups, age, gender, rank, marital status, length of service, qualification, religious affiliations, place of posting and districts.
- exploring the difference, if any, in the quantum and type of personality traits among Police Personnel across different age, gender, rank, length of service and qualification.

- to propose managerial interventions to handle the stress among police personnel.

#### 4.3 Hypotheses

Hypotheses deal with the expected results to be obtained from a research inquiry. Hypotheses are generally based upon a scientific theory, allowing for both prediction and testability (Goodwin, 2008). The various major and sub hypotheses of study are listed below:

**H01: There is no difference in the nature and intensity of stress (measured through ORS and its ten constituent stressors) among police personnel.**

- H01a: There is no difference in the nature and quantum of stress among police personnel vis-à-vis other *occupational groups*.
- H01b: There is no difference in quantum and type of stress between *Civil Police* personnel and *Armed Police* personnel.
- H01c: There is no difference in quantum and type of stress among police personnel as per their *rank*.
- H01d: There is no difference in quantum and type of stress between *married* and *unmarried* police personnel.
- H01e: There is no difference in quantum and type of stress between *male* and *female* police personnel.
- H01f: There is no difference in quantum and type of stress among police personnel as per their *religious affiliations*.
- H01g: There is no difference in quantum and type of stress among respondents belonging to different *age* groups.
- H01h: There is no difference in quantum and type of stress among respondents having different *educational attainments*.
- H01i: There is no difference in quantum and type of stress among respondents having varying *length of experience*.
- H01j: There is no difference in quantum and type of stress between police personnel having *rural* vis-à-vis *urban* postings.
- H01k: There is no difference in quantum and type of stress among police personnel across different *districts*.

**Ho2: There is no difference in nature and spread of personality traits among police personnel.**

- Ho2a: There is no difference in personality traits among police personnel across *gender*.
- Ho2b: There is no difference in personality traits among respondents as per different *age* groups.
- Ho2c: There is no difference in personality traits among respondents having varying *length of experience*.
- Ho2d: There is no difference in personality traits among police personnel across *hierarchal levels*.
- Ho2e: There is no difference in personality traits among respondents between *Civil Police* personnel and *Armed Police* personnel.
- Ho2f: There is no difference in personality traits among police personnel as per their *educational attainments*.

**Ho3: There is no correlation between stress (measured through ORS and its ten constituent stressors) and different personality traits among police personnel.**

**Ho4: There is no impact of personality traits on stress among police personnel.**

- Ho4a: There is no impact of *Activity* on stress among police personnel
- Ho4b: There is no significant impact of *Sociability* on stress among police personnel
- Ho4c: There is no significant impact of *Impulsive Sensation Seeking* on stress among police personnel
- Ho4d: There is no significant impact of *Aggression-Hostility* on stress among police personnel
- Ho4e: There is no significant impact of *Neuroticism-Anxiety* on stress among police personnel

#### **4.4 Research Design**

The study uses descriptive as well as exploratory research design – employing both quantitative and qualitative research approaches. Quantitative approach

focuses on numerical presentation and analysis of data. The qualitative paradigm has become increasingly popular in psychological research in recent years (Heppner & Heppner, 2004; Goodwin, 2008). It deals with data that arises out of interviews, case study reports and observational studies (Heppner et al., 1999). Descriptive statistics reduces a large quantity of data into information that is more comprehended (Goodwin, 2008). Thus, the objective of the descriptive statistics is to summarize data into manageable information. Inferential statistics is used to generalize the data from a sample group into the population as a whole (Gravetter & Forzano, 2003). In the present study, an open-ended survey is conducted to assess the variables. In addition, interviews are also conducted to get the in-sight of the phenomenon.

#### **4.5 The Sample**

The participants in this study are police personnel (N=500). The sample for the study is selected from the civil and armed police of seven districts of the state Uttar Pradesh, namely, *Aligarh, Agra, Kannauj, Farrukhabad, Hardoi, Auraiya* and *Jhansi*. Police departments are expected to have a uniform organizational culture throughout the length and breadth of the country. However, there are noticeable differences in the working of police departments across states, even districts.

Overall, a multistage sampling was resorted to for data collection. First, Uttar Pradesh is selected for data collection. With the population of around 200 millions, Uttar Pradesh is the most populous state of the country (Census of India, as on 01.03.2012) as well as the world's most populous sub national entity. It is the state with all religions, castes and colors. Maintaining law and order situation in such a state is far more challenging than other parts of the country. In Uttar Pradesh, as on 01.01.2012, the actual strength of Civil and District Armed police is 1.43 *lakhs* (0.143 millions) while the actual strength of State Armed police is 0.298 *lakhs* (0.0298 millions). Further, Quota sampling is employed on the basis of districts. Overall, 70 quotas were identified. Out of 70 quotas, 10% (i.e. 7 districts) are chosen for data collection. The districts were identified on the basis of crime proneness and availability of data. The districts selected for data collection were *Aligarh, Agra, Kannauj, Farrukhabad, Hardoi, Auraiya* and



*Jhansi*. Finally, within the identified district, convenience sampling was used for data collection. In convenience sampling, the sample is selected on the basis of the convenience of the participant and the researcher. The police personnel who were available and willing to participate in the study were selected for the survey. Despite limitations, convenience sampling allows for the attainment of a large sample of data in a short duration of time (Dyer, 1995; Gravetter & Forzano, 2003). Convenience sampling technique is suitable when the sample selected for the study meet the requirement of the study (Goodwin, 2008). Thus, the use of convenience sampling in this particular study is considered acceptable.

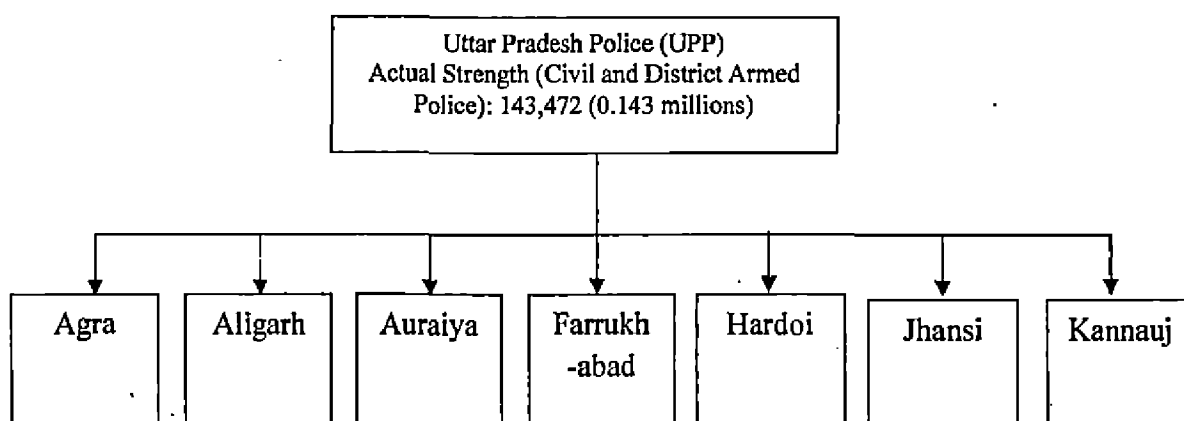
#### **4.6 Data Collection**

For the present study 2,135 police personnel of 68 police stations were personally approached for participation in the study. Out of them, 1,542 personnel responded positively. Questionnaires were given to 1,455 police personnel. After continued persuasion and visits, only 672 police personnel returned the questionnaire. Out of these returned questionnaires, 272 questionnaires were either incomplete or invalid. Thus, a total of 500 responses were found valid and correct in all respect. Therefore, the response rate was 23.44% only. One major reason to choose non-probability sampling and convenience sampling was the non-response rate of the personnel approached. The low response rate was probably due to round the clock duty and high workload of the police personnel.

As described earlier, the data is collected from seven districts of Uttar Pradesh. The data is collected from 500 police personnel of 34 police stations and 5 police lines. The data is collected from 341 civil police personnel (68.2%) and 159 armed police personnel (31.8%). Within civil police, 89 (17.8%) filled questionnaires are collected from 14 police stations of *Agra* district; 38 (6.8%) from 2 police stations of *Aligarh* district; 33 (6.6%) from 3 police stations of *Auraiya* district; 26 (5.2%) from 3 police stations of *Farrukhabad* district; 6 (1.2%) from 1 police station of *Hardoi* district, 10 (2.0%) from 1 police station of *Jhansi* district and 143 (28.6%) from 8 police stations of *Kannauj* district. On the other hand, within armed police force, 104 (20.8%) filled questionnaires are collected from Reserve police Line, *Agra*; 4 (0.8%) from Reserve Police Line, *Auraiya*, 4 (0.8%) from Reserve Police Line, *Farrukhabad*, 14 (2.8%) from

Reserve Police Line, *Hardoi*, 2 (0.4%) from Reserve Police Line, *Jhansi* and 31 (6.2%) from Reserve Police Line, *Kannauj*. On the basis of place of posting of police personnel, 157 (31.4%) police personnel were posted in rural areas and remaining 343 (68.6%) were posted in urban areas. Figure 4.1, Table 4.1, Table 4.2 and Table 4.3 presents the process of sample selection.

**Figure 4.1: Process of Sample Selection**



**Table 4.1: Data Collection from Police Station**

District	Police Station (District Civil Police)	Filled Questionnaire collected	Rural/Urban
Agra	Chatta	7	Urban
	Sikandara	11	Urban
	MM Gate	4	Urban
	Hari Parvat	6	Urban
	Taj Ganj	9	Urban
	Rakabganj	13	Urban
	New Agra	4	Urban
	Loha Mandi	4	Urban
	Sadar	6	Urban
	Mantolla	7	Urban
	Etmatuddaula	5	Urban
	Kotwali	4	Urban

	Jagdishpura	3	Urban
	Mahila Thana (Female PS)	6	Urban
<i>Total</i>	<i>14 Police Stations</i>	<i>89</i>	
Aligarh	Civil Lines	17	Urban
	Mahila Thana (Female PS)	17	Urban
<i>Total</i>	<i>2 Police Stations</i>	<i>34</i>	
Auraiya	Kotwali	15	Urban
	Phaphund	10	Rural
	Mahila Thana (Female PS)	8	Urban
<i>Total</i>	<i>3 Police Stations</i>	<i>33</i>	
Farrukhabad	Fatehgarh	4	Urban
	Jahanganj	9	Rural
	Mahila Thana	13	Urban
<i>Total</i>	<i>3 Police Stations</i>	<i>26</i>	
Hardoi	Bilgram	6	Rural
<i>Total</i>	<i>1 police station</i>	<i>6</i>	
Jhansi	Samthar	10	Urban
<i>Total</i>	<i>1 police station</i>	<i>10</i>	
Kannauj	Saurikh	17	Rural
	Chhibramau	33	Rural
	Tirwa	22	Rural
	Talegram	16	Rural
	Indergarh	22	Rural
	Gursahaiganj	14	Rural
	Vishungarh	8	Rural
	Mahila Thana	11	Urban
<i>Total</i>	<i>8 Police Stations</i>	<i>143</i>	

**Table 4.2: Data Collection from Reserve Police Lines**

<b>District</b>	<b>Number of filled questionnaire collected</b>	<b>Rural/Urban</b>
Agra	104	Urban
Auraiya	4	Urban
Farrukhabad	4	Urban
Hardoi	14	Urban
Jhansi	2	Urban
Kannauj	31	Urban
<i>Total</i>	<i>159</i>	

**Table 4.3: Data Collection from Civil and Armed Police**

<b>District</b>	<b>Civil police</b>	<b>Armed Police</b>	<b>Total</b>	<b>Rural police</b>	<b>Urban police</b>
Agra	89	104	193	–	193
Aligarh	34	–	34	–	34
Auraiya	33	4	37	10	27
Farrukhabad	26	4	30	9	21
Hardoi	6	14	20	6	14
Jhansi	10	2	12	–	12
Kannauj	143	31	174	132	42
<i>Grand Total</i>	<i>341</i>	<i>159</i>	<i>500</i>	<i>157</i>	<i>343</i>

However, due care has been taken in selecting the sample to ensure that the sample represents the population. The data has been collected through field visits to the police stations and police lines. The data was collected during April 2011 to October 2011.

#### 4.7 Respondents Characteristics

Table 4.4 summarizes the respondents' characteristics of the sample. The participants in this study consisted of 439 males (87.8%) and 61 females (12.2%). The significant difference between the number of male and female participants is due to very less number of women police in the state police force of the country. The BPR&D data (as on 01.01.2012) reports that the actual strength of women police in the country is 84,479 out of 15.85 *lakhs* (1.585 million) of total actual strength of the police. The data shows that women constitute only 5.32% of the total police force in the country. The proportion of actual women civil police to the total police is 1:18.7 (Crime in India Report, 2012). In Uttar Pradesh police, the actual strength of women police is only 2,586 against 1.73 *lakhs* (0.173 million) of total police force (BPR&D as on 01.01.2012). In UPP, the women police force is only 1.49% of total police force. Another major problem with women police is the scattered distribution of the women police. In Uttar Pradesh, there are only 71 *Mahila Thana* (Female Police Station) in the entire state. Also, in every female police station, police force is inadequate. Despite the limitations, due care has been taken to provide sufficient coverage to women respondents.

Table 4.4: Respondents' profile

Socio-demographic Variables		Sample	Percentage
Gender	Male	439	87.80
	Female	61	12.20
Age	Up to 30 years	119	23.8
	31-40 years	97	19.4
	41-50 years	121	24.2
	51-60 years	163	32.6
Experience	Up to 10 years	129	25.8
	11-20 years	99	19.8
	21-30 years	131	26.2
	31-40 years	139	27.8
	>40 years	2	0.4

Hierarchical level	Higher Level SP/ASP/RI	8	8	1.6
	Middle Level Inspector/SHO/SO 13 Sub Inspector 71		84	16.8
	Lower Level Head Constable 45 Constable 363		408	81.6
Police Categories	Civil Police		341	68.2
	Armed Police		159	31.8
Qualification	Secondary		217	43.4
	Graduation		214	42.8
	Post Graduation/Doctoral		69	13.8
Marital Status	Married		465	93.0
	Unmarried		35	7.0
Spouse Status	Working		111	23.87
	Non-Working		354	76.13
Religious affiliations	Islam		57	11.4
	Hindu		443	88.6

The respondents have been classified in four age groups. 23.8% of the respondents fall within age group of 20 to 30 years. 97 (19.4%) respondents fall between age group of 31 to 40 years, 121 (24.2%) are part of age group of 41 to 50 years while the maximum number of participants i.e. 163 (32.6%) had ages between 51 to 60 years. Like age, respondents' experience is also varying. Almost all the respondents reported that they have joined police as their first career. 129 (25.8%) participants had experience of less than or equal to ten years in the police department. 19.8% had experience of eleven to 20 years, 26.2% of the sample had been part of police department for 21 to 30 years. 141 (28.2%) respondents were associated with the department for more than 31 years.

The data was collected across all the ranks. It covered Constables, Head Constables, Sub-Inspectors and Inspectors. Despite efforts, we could not collect sufficient number of responses from top police officials like Superintendent of Police, Senior Superintendent of Police, Inspector General etc. This was due to inadequate number of senior rank police officers in Indian police. The hierarchical structure of Indian police is in the form of a pyramid. Only 1% of the police personnel are in the senior rank, 14% are on junior rank and 85% constitute the remaining part of the police department (Human Rights Watch, 2009). There are only five to six senior police officers in a small-sized district. In addition to it, their responsibilities are numerous. They had tight schedule. Although many of them cooperated overall but all of them were not able to fill the questionnaire themselves. For analysis, respondents were categorized into three levels - *higher*, *middle* and *lower*. 16.8% respondents constitute middle level with 13 Inspectors/SHO/SO and 71 Sub Inspectors. In this study, the bottom rung of the police department constitutes the major part as in actual police department. 408 (81.6%) participants participated in the study. Out of which 45 were Head Constables and 363 were Constables. The sample has been taken from two major branches of the district police, namely - *District Civil Police* and *District Armed Police*. 341 (68.2%) police personnel were the part of the Civil Police while 159 (31.8%) police personnel have participated from the Armed Police in the study. As per the qualification, three groups were formed. The majority of the participants were either intermediate or graduate. 217 (43.4%) police personnel were intermediate, 214 (42.8%) were Graduate. Further, 69 (13.8%) were either Post Graduate or Doctorate. The demographic data of the respondents indicated that majority of the participants were married (93%) at the time of survey while remaining 35 (7%) were unmarried. In the married group of 465 members, 111 (23.87%) reported that their spouses were working and remaining 354 (76.13%) reported that their spouses were shouldering household responsibilities fulltime. As regards religious affiliations of, 443 (88.6%) respondents were Hindus while 57 (11.4%) indicated that they profess Islam.

#### 4.8 Instruments and Scale refinement

Two psychometric instruments were administered for the quantitative study, namely- *Zuckerman Kuhlman Personality Questionnaire- Cross Cultural Shorter Version* (ZKPQ-50CC; Aluja et al., 2006) and *Organizational Role Stress scale* (ORS; Pareek, 1981). One open ended and one socio-demographic questionnaire was also included to obtain the necessary data of the respondents. In this section, the two close-ended questionnaires used in the study are detailed out.

##### 4.8.1 Organizational Role Stress Scale (ORS)

As earlier noted, Organizational Role Stress scale was developed by Prof. *Udai Pareek* in the year 1981. The scale is widely used instrument for measuring ten potent stressors. The scale contains five items for each role stressor (a total of 50 statements) and it uses a five point *likert* scale ranging from zero to four. Thus, the total score on each role stressor ranges from zero to twenty.

For the present study, the authorized Hindi version of ORS developed and used in Talib (1999) was administrated. The pilot study was carried on 20 police personnel. After getting responses, the Hindi ORS questionnaire was administrated on the full sample. The ORS scale is a comprehensive tool to elicit data about different role stressors afflicting a respondent. It covers a range of stressors that may be experienced by an occupational group (Talib, 1999). The ORS scale covers the following stressors:

- **Inter Role Distance (IRD, 5 items):** “Conflict between the organizational and non-organizational roles”.
- **Role Stagnation (RS, 5 items):** “Feeling of being stuck in the same role”. It occurs when the individual perceives no opportunity for his/her career progression.
- **Role Expectation Conflict (REC, 5 items):** “Conflicting expectations or demands by the different role senders”.
- **Role Erosion (RE, 5 items):** “Feeling that the functions that should belong to incumbent’s role are being transferred/ performed and shared by other roles”. It is a feeling of responsibility without power.



- **Role Overload (RO, 5 items):** “Feeling that too much is expected from the role than what the occupant can cope with”. It may quantitative and qualitative both.
- **Role Isolation (RI, 5 items):** “Lack of linkages of one’s role with other roles in the organization”.
- **Personal Inadequacy (PI, 5 items):** “Lack of knowledge, skills, or adequate preparation to be effective in a particular role”.
- **Self Role Distance (SRD, 5 items):** “Feeling of conflicts in one’s values and self concepts with the requirements of the organizational role”.
- **Role Ambiguity (RA, 5 items):** “Lack of clarity about expectations of others from the role, or lack of feedback on how performance is regarded by others”.
- **Resource Inadequacy (RIIn, 5 items):** “Non-availability of resources needed for effective performance”.

In order to make suitable for the present study, both the scales were refined through *item analysis* (reliability analysis) and *factor analysis* (exploratory and confirmatory). Reliability refers to the accuracy and precision of a measurement procedure (Thorndike et al., 1991). Reliability may be viewed as an instrument’s relative lack of error. Internal consistency is a procedure to estimate the reliability of a test from a single administration of a single form. *Cronbach’s Alpha* is a tool for assessing the internal consistency of the scale (Santos, 1999). Cronbach’s Alpha is a numeric coefficient of internal consistency. Alpha coefficient ranges in value from 0 to 1 and may be used to describe the reliability of factors extracted from scales. The closer Cronbach’s alpha coefficient is to 1.0, the greater the internal consistency of the scale (Gliem & Gliem, 2003). Hair (2010) has indicated 0.7 to be an acceptable reliability coefficient but lower thresholds are sometimes used in the literature. George & Mallery (2003) provided the following rules of thumb: “\_ > .9 – Excellent, \_ > .8 – Good, \_ > .7 – Acceptable, \_ > .6 – Questionable, \_ > .5 – Poor, and \_ < .5 – Unacceptable”.

**Table 4.5: Reliability Statistics (ORS Scale)**

Cronbach's Alpha	0.935
No. of Items	50

The ORS scale indicates a Cronbach's Alpha of 0.935 (Table 4.5) which indicates excellent internal consistency of the set of items forming the ORS scale. Table 4.6 presents other statistics for ORS scale, such as, mean, variance, standard deviation and others.

**Table 4.6: Statistics for the Scale (ORS Scale)**

Items	Mean	Variance	Standard Deviation
50	107.56	1253.797	35.409

In addition to assessing the reliability of ORS scale, the construct validity of these instruments for Indian context was assessed by means of Exploratory and Confirmatory Factor Analysis. Factor analysis is used to ascertain the factor domains that underlie a variable or measure. Thus, it allows for the grouping together of factors that measure the same, or a similar construct (de Bruin, 2004; Urbina, 2004). Both exploratory factor analysis as well as confirmatory factor analysis had been attempted in the study.

*Exploratory factor analysis* (EFA) attempts to discover the nature of the constructs influencing a set of responses. To further evaluate the factorability of the data, the *Kaiser-Meyer-Olkin* (KMO) measure of sampling adequacy was employed. This index compares the magnitudes of the observed correlation coefficients to the magnitudes of the partial correlation coefficients. The KMO index ranges from 0 to 1, with 0.6 suggested as the minimum value for factor analysis (Tabachnick & Fidell, 2001). Hair et al. (2010) indicated that a KMO of .80 or above is meritorious; between .80 and .70 is middling; between .70 and .60 is mediocre; between .60 and .50 is miserable; below .50 is unacceptable (Broekhuizen, 2006). In the present study, the KMO measure is 0.89 (Table 4.7) which is meritorious. The value indicated that the correlation between pairs of the variables could be highly explained by other variables and that factor analysis was an appropriate for the study.

**Table 4.7: Kaiser-Meyer-Olkin test (ORS Scale)**

Test	Test Statistic	Degrees of Freedom	Significance
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.894	1225	.000
Bartlett's Test of Sphericity	9484.498		

Once it was ascertained that factor analysis is an appropriate technique, the items were subjected to exploratory factor analysis with *Principal axis factoring* and *Varimax* rotation (Arnold & Reynolds, 2003; Hair et al., 1998; Nunnally, 1978). Principal axis factor is a multivariate procedure which rotates that data such that maximum variabilities are projected onto the axes (Pallant, 2007; Tabachnick & Fidell, 2001). *Varimax* rotation, suggested by Kaiser in 1958, is often used to see how groupings of items measure the same concept (Kaiser, 1958).

Once the number of factors was determined, the resultant factor matrix was interpreted. To facilitate interpretation, the factors were rotated. Diekhoff (1992) stated that the factors which explain the most variance are rotated to make their meaning clearer. For the purpose of this study, the factors were rotated according to Varimax criterion. To enhance interpretation of the factor matrix, loading greater than 0.40 were considered (Hair et al., 1998; Rossiter, 2002). Thus, items RA\_2, RI\_3, RIn\_3, RS\_4, PI\_4, and RIn\_5 were eliminated from the scale. The remaining 44 items had factor loading more than 0.4 (Table 4.8). Based on the scree test criterion, a five factor solution was revealed from the data. The factor solutions accounted for 62.987% of total variance.

**Table 4.8: Factor loading of retained items of ORS**

<b>S. No.</b>	<b>Item Name</b>	<b>Statement</b>	<b>Factor Loading</b>
1.	IRD_1	My role tends to interfere with my family life.	0.624
2.	RS_1	I am afraid I am not learning enough in my present role for taking up higher responsibility.	0.535
3.	REC_1	I am not able to satisfy the conflicting demands of various people above me.	0.636
4.	RE_1	My role has recently been reduced in importance.	0.530
5.	RO_1	My workload is too heavy.	0.540
6.	RI_1	Other role occupants do not give enough attention and time to my role.	0.524
7.	PI_1	I do not have adequate knowledge to handle the responsibilities in my role.	0.610
8.	SRD_1	I have to do things, in my role, that are against my better judgment.	0.551
9.	RA_1	I am not clear on the scope and responsibilities of my role (job).	0.702
10.	RIn_1	I do not get the information needed to carry out responsibilities assigned to me.	0.470
11.	IRD_2	I have various other interests (social, religious etc.) which remain neglected because I do not get time to attend to these.	0.570
12.	RS_2	I am too preoccupied with my present role responsibility to be able to prepare for taking up higher responsibilities.	0.528

13.	REC_2	I am not able to satisfy the conflicting demands of my peers and juniors.	0.586
14.	RE_2	Many functions that should be a part of my role have been assigned to some other role.	0.715
15.	RO_2	The amount of work I have to do interfere with the quality I want to maintain.	0.475
16.	RI_2	There is not enough interaction between my role and other roles.	0.574
17.	PI_2	I wish I had more skills to handle the responsibilities of my role.	0.780
18.	SRD_2	I am not able to use my training and expertise in my role.	0.457
19.	RIn_2	I do not get enough resource to be effective in my role.	0.524
20.	IRD_3	My role does not allow me enough time for my family.	0.755
21.	RS_3	I do not have time and opportunities to prepare myself for the future challenges of my role.	0.454
22.	REC_3	I am not able to satisfy the demands of clients and others, since these are conflicting with one another.	0.590
23.	RE_3	I would like to take on more responsibility than I am handling at present.	0.618
24.	RO_3	I have been given too much responsibility.	0.589
25.	PI_3	I have not had the right training for my role.	0.660

26.	SRD_3	The work I do in the organization is not related to my interests.	0.423
27.	RA_3	Several aspects of my role are vague and unclear.	0.444
28.	IRD_4	My organizational responsibilities interfere with my extra organizational roles.	0.490
29.	REC_4	The expectations of my seniors conflict with those of my juniors.	0.705
30.	RE_4	I can do much more than what I have been assigned.	0.677
31.	RO_4	There is a need to reduce some parts of my role.	0.518
32.	RI_4	There is no evidence of several roles (including mine) being involved in joint problem solving or collaboration for planning action.	0.485
33.	SRD_4	If I had full freedom to define my role, I would be doing some things differently from the way I do them now.	0.591
34.	RA_4	My role has not been defined clearly and in detail.	0.576
35.	RIn_4	I am rather worried that I lack the necessary facilities needed in my role.	0.592
36.	IRD_5	My family and friends complain that I do not spend time with them due to heavy demands of my work role.	0.605
37.	RS_5	I feel stagnant in my role.	0.462
38.	REC_5	I am bothered with the contradictory expectations different people have from my role.	0.519

39.	RE_5	I wish I had been given more challenging tasks to do.	0.719
40.	RO_5	I feel overburdened in my role.	0.433
41.	RI_5	Even when I take the initiative for discussions or help, there is not much response from other roles.	0.424
42.	PI_5	I need more training and preparation to be effective in my work role.	0.520
43.	SRD_5	I experience a conflict between my values and what I have to do in my role.	0.474
44.	RA_5	I am not clear what priorities are in my role.	0.466

After performing the *Exploratory Factor* analysis, 44 items of the ORS scale were retained, which measured ten dimensions of the scale. *Cronbach alpha* coefficients were used to assess the scale reliabilities again. The reliability coefficients ranged from 0.610 to 0.746 (Table 4.9). These values suggested that the scales were reliable and could be used for further analysis.

**Table 4.9: Reliability coefficients of retained dimensions (ORS Scale)**

S. No.	Dimension	Item	Cronbach Alpha
1.	Inter Role Distance (IRD)	IRD_1, IRD_2, IRD_3, IRD_4, IRD_5	0.704
2.	Role Stagnation (RS)	RS_1, RS_2, RS_3, RS_5	0.658
3.	Role Expectation Conflict (REC)	REC_1, REC_2, REC_3, REC_4, REC_5	0.624
4.	Role Erosion (RE)	RE_1, RE_2, RE_3, RE_4, RE_5	0.612

5.	Role Overload (RO)	RO_1, RO_2, RO_3, RO_4, RO_5	0.746
6.	Role Isolation (RI)	RI_1, RI_2, RI_4, RI_5	0.624
7.	Personal Inadequacy (PI)	PI_1, PI_2, PI_3, PI_5	0.658
8.	Self Role Distance (SRD)	SRD_1, SRD_2, SRD_3, SRD_4, SRD_5	0.626
9.	Role Ambiguity (RA)	RA_1, RA_3, RA_4, RA_5	0.614
10.	Resource Inadequacy (RIn)	RIn_1, RIn_2, RIn_4	0.610
	Organizational Role Stress (ORS)		0.925

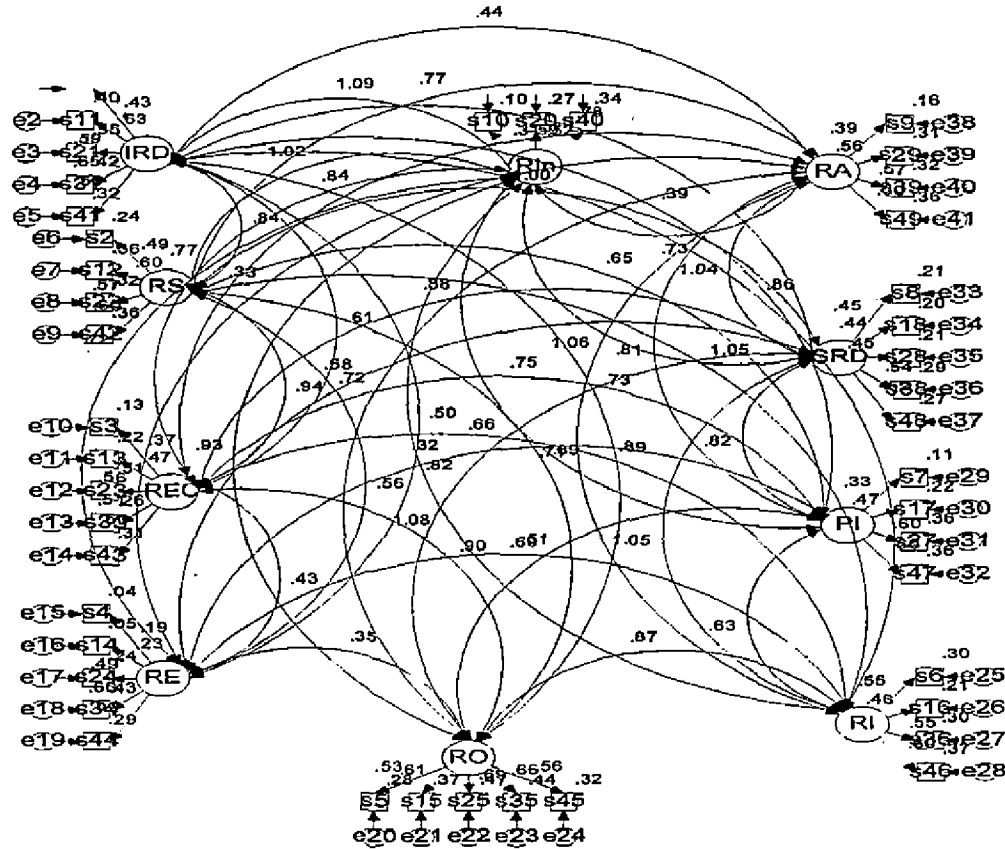
But before finally exploring the dimensions through EFA it is important to undertake *Confirmatory Factor Analysis* based on the integrated model. After performing exploratory factor analysis for the scale, confirmatory factor analyses were conducted with AMOS 16.0 (Arbuckle, 2007). It uses one or more variables for a single independent or dependent concept and then estimates reliability. The researcher can assess the contribution of each scale item and determine how well the scale measures the concept (Hair et al., 2010). The CFA Measurement Model (Figure 4.2) analyzes the items retained by EFA on respective dimensions of *Inter Role Distance (IRD)*, *Role Stagnation (RS)*, *Role Expectation Conflict (REC)*, *Role Erosion (RI)*, *Role Overload (RO)*, *Role Isolation (RI)*, *Personal Inadequacy (PI)*, *Self Role Distance (SRD)*, *Role Ambiguity (RA)* and *Resource Inadequacy (RIn)*.

The next step is to determine model fit. Model modification may be necessary if model fit indices are less than satisfactory. Parameters may be eliminated when they do not exceed the tabulated t-value (e.g.,  $t > 1.96$ ) for statistical significance. Global fit measures such as the Chi-Square test and RMSEA (root mean square error of approximation) were assessed. RMSEA should not exceed 1.0 (Schumacker & Lomax, 2004). Kline (1998) recommends a value of 3.0 for the chi square statistic (CMIN/DF) to be acceptable. Other fit indices, such as NNFI



(non-normed fit index), GFI (goodness of fit), AGFI (adjusted goodness of fit) and CFI (comparative fit index) were also assessed. For these indices, values close to 1.0 indicate a good fit. Smaller values, which are close to .00 indicate a poor fit (Schumacker & Lomax, 2004).

Figure 4.2: CFA Measurement Model (ORS Scale)



The results from analyzing the model indicated a good fit for all ten dimensions i.e. *Inter Role Distance (IRD)*, *Role Stagnation (RS)*, *Role Expectation Conflict (REC)*, *Role Erosion (RI)*, *Role Overload (RO)*, *Role Isolation (RI)*, *Personal Inadequacy (PI)*, *Self Role Distance (SRD)*, *Role Ambiguity (RA)* and *Resource Inadequacy (RIn)*. The value of CMIN/DF was calculated 2.562, below the recommended value of 3.0 (Arbuckle, 2007). The RMSEA for the measurement model was .074. Browne & Cudeck (1993) suggested that a value less than .08 indicate a good model fit. Other fit indices also pointed to a fair and acceptable model fit (NFI = .812, GFI = .894, CFI = .921). Table 4.10 provides the results for each of the fit indices of the CFA Measurement Model.

**Table 4.10: CFA Measurement Model (ORS Scale)**

Fit Indices	Recommended level	Measurement Model
CMIN/df	<3.00 (Arbuckle, 2007; Byrne, 2001)	2.562
GFI	>.90 (Byrne, 2001; Hair et al., 1998)	0.894
AGFI	>.90 (Byrne, 2001; Hair et al., 1998)	0.846
NNFI	>.90 (Hu & Bentler, 1995)	0.812
CFI	>.90 (Bentler, 1992)	0.921
RMSEA	<.08 (Heene et al., 2011)	0.074

The measurements calculated above with the help of reliability analysis, exploratory factor analysis and confirmatory factor analysis reported that the data collected from the refined ORS scale of 44 items fits with the hypothesized research model.

#### **4.8.2 Zuckerman Kuhlman Personality Questionnaire- Cross Cultural Shorter Version (ZKPQ-50CC; Aluja et al., 2006)**

The shorter cross-cultural version of the Zuckerman Kuhlman Personality Questionnaire was developed by Aluja et al. (2006). The scale has five personality dimensions. This scale had been developed for assessing the personality traits of the four countries population, namely, English (United States), French (Switzerland), German (Germany), and Spanish (Spain). This shorter version of measuring personality traits is based on original Zuckerman-Kuhlman Personality Questionnaire (Zuckerman et al., 1993; Zuckerman-III-R). The original questionnaire had 99-items. The 99-items version contained the following constituents: *Impulsive Sensation Seeking* (ImpSS, 19 items), *Neuroticism-Anxiety* (N-Anx, 19 items), *Aggression-Hostility* (Agg-Host, 17 items), *Activity* (Act, 17 items), *Sociability* (Sy, 17 items), and *Infrequency* (Inf, 10 items). The *Infrequency* scale is only used to assess the validity of individual records and not intended to be a trait scale. The Alpha reliability of the scale varied between 0.72 and 0.86 (Zuckerman, 2002). The original 99-items version of the ZKPQ has been adapted in different countries and languages, for example, China (Wu et al., 2000), Germany (Ostendorf & Angleitner, 1994), Italy (De Pascalis & Russo, 2003), Japan (Shiomi et al., 1996), Spain (Goma-i-Frueixanet et al., 2004; 2005),

Serbia (Mitrovic et al., 2009) and Spanish versions (Aluja et al., 2002, 2004a; Herrero et al., 2001; Romero et al., 2002).

Researcher's perusal of literature indicated that three short versions of the ZKPQ had been developed. The 35-items version (Zuckerman, 2002), with seven items per dimension, had *Cronbach alpha* value between 0.62 and 0.79. The second version 69-items, was developed by Aluja & his colleagues in 2003. These 69 items were selected through exploratory and confirmatory factor analysis (Byrne, 1993; Yadama & Drake, 1995). Internal consistency of the items was similar to original 99-items version, and varied between 0.74 and 0.81 (Aluja et al., 2006). The third version of 50-items used in this study was developed again by Aluja & his colleagues in 2006 through combining exploratory and confirmatory factor analyses. The aim of this version was to develop a version of the ZKPQ with a robust structure and acceptable psychometric properties in four languages, namely- English, French, German and Spanish (Aluja et al., 2006).

The present 50-items shorter cross cultural version of ZKPQ has 50 items in five dimensions. A brief description of these personality dimensions will be apt at this juncture. The ZKPQ-50-CC covers five personality dimensions, namely- *Activity*, *Sociability*, *Impulsive Sensation Seeking*, *Aggression-Hostility* and *Neuroticism-Anxiety*. As per the items of *Activity* (*Act*, 10 items), about half of the items describe a need for activity and an inability to relax and do nothing when the opportunity presents itself. The other half attempts to assess a preference for hard and challenging work, an active busy life, and a high energy level. *Sociability* (*Sy*, 10 items) items describe the social activeness of the individual. The construct assesses the number of friends individual has and the amount of time spent with friends as opposed to being alone and pursuing solitary activities. *Impulsive Sensation Seeking* (*ImpSS*, 10 items) items involve a lack of planning and a tendency to act impulsivity without thinking. The ImpSS items are general in nature. These items can be described as experience seeking, or the willingness to take risks for the sake of excitement or novel experience. As per *Aggression-Hostility* (*Agg-Host*, 10 items) about half of the items describe a readiness to express verbal aggression, while the other half are concerned with rude, thoughtless, or antisocial behavior, revengefulness and spitefulness. People

scoring high in this scale admit a quick temper and impatient with others. *Neuroticism-Anxiety (N-Anx, 10 items)* items describe emotional upset, tension, worry, fearfulness, obsessive indecision, lack of self-confidence, and sensitivity to criticism.

The ZKPQ-50-CC scale is widely used instrument to measure personality traits in world context. As described earlier, the scale contains ten items for each personality trait (a total of 50 items). The original ZKPQ shorter cross-cultural version contains a dichotomous scale (with Yes or No responses). But, *Likert* scale has been used for this particular study. This has been done to make data analysis more realistic and rich. As the other instrument used in the study (ORS) is also a *Likert* scale, it facilitated comparison. The *Likert* scale used in the study is a five point scale with response ranging from zero to four. Thus the total score on each personality trait ranges from zero to forty. For this study, ZKPQ-50-CC scale was first translated in Hindi, and administrated on 20 police personnel. This pre-testing helped in improving the comprehensibility of the ZKPQ-50-CC scale in Hindi language. However, for ensuring the true essence is not lost in the Hindi version, the opinions from the subject experts and translators were taken. Finally, the Hindi version of ZKPQ-50-CC scale was administrated on the sample.

In the same process described earlier, *Cronbach alpha* value for the ZKPQ-50-CC scale has been calculated to check the reliability of the scale Table 4.11. The *Cronbach Alpha* value for the scale was calculated 0.817 which indicates good consistency of the sets of items forming ZKPQ-50-CC scale.

**Table 4.11: Reliability Statistics (ZKPQ-50-CC)**

Cronbach's Alpha	0.817
No. of Items	50

Similarly, the EFA was carried on the items of ZKPQ-50-CC scale. *The Kaiser-Meyer-Olkin* (KMO) measure for this scale was 0.80 (Table 4.12) which is meritorious (Hair et al., 2010). The value indicated that the correlation between pair of variables could be highly explained by other variable and to proceed with the factor analysis was an appropriate approach.

**Table 4.12: Kaiser-Meyer-Olkin test (ZKPQ-50-CC)**

Test	Test Statistic	Degrees of Freedom	Significance
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.801	1225	.000
Bartlett's Test of Sphericity	7485.498		

After the KMO and Bartlett's test of Sphericity, the items were subjected to exploratory factor analysis with *Principal Component Method* and *Varimax* rotation (Arnold & Reynolds, 2003). The number of factors was restricted to five as in original scale. The resultant factor matrix was interpreted with the help of rotated component matrix. To enhance the key dimensions for this study, the factor loading greater than 0.40 were considered (Hair et al., 2006) for further study. Thus, items Agg-Host\_1, ImpSS\_1, N-Anx\_1, Agg-Host\_2, ImpSS\_2, ImpSS\_3, Sy\_4, Agg-Host\_5, Sy\_6, Agg-Host\_7, Agg-Host\_9, and ImpSS\_10 were eliminated to be analyzed through CFA methods. After the EFA, 38 items were retained in the scale (Table 4.13).

**Table 4.13: Factor loading of retained items of ZKPQ-50-CC Scale**

S. No.	Item Name	Statements	Factor Loading
1.	Act_1	I do not like to waste time just sitting around and relaxing.	0.410
2.	Sy_1	I do not mind going out alone and usually prefer it to being out in large group.	0.490
3.	Act_2	I lead a busier life than most people.	0.426
4.	Agg-Host_3	I almost never feel like I would like to hit someone.	0.414
5.	Sy_2	I spend as much time with my friends as I can.	0.436
6.	N-Anx_2	I frequently get emotionally upset.	0.400
7.	Agg-Host_4	If someone offends me, I just try not to think about it.	0.469
8.	Act_3	I like to be doing things all of the time.	0.538

9.	N-Anx_3	I tend to be oversensitive and easily hurt by thoughtless remarks and actions of others.	0.402
10.	Sy_3	I do not need a large number of casual friends.	0.432
11.	Act_4	I can enjoy myself just lying around and not doing anything active.	0.461
12.	N-Anx_4	I am easily frightened.	0.484
13.	Act_5	I do not feel the need to be doing things all of the time.	0.404
14.	N-Anx_5	I sometimes feel panicky.	0.421
15.	Sy_5	At parties, I enjoy mingling with many people whether I already know them or not	0.400
16.	ImpSS_4	I sometimes like to do things that are a little frightening.	0.415
17.	Act_6	When on vacation, I like to engage in active sports rather than just lie around.	0.515
18.	ImpSS_5	I'll try anything once	0.433
19.	N-Anx_6	I often feel unsure of myself.	0.424
20.	Act_7	I like to wear myself out with hard work or exercise.	0.403
21.	ImpSS_6	I would like the kind of life where one is on the move and travelling a lot, with lots of change and excitement.	0.412
22.	N-Anx_7	I often worry about things that other people think are unimportant.	0.426
23.	Agg-Host_6	When people disagree with me I cannot help getting into an argument with them	0.410
24.	Sy_7	Generally, I like to be alone so I can do things I want to do without social distractions.	0.405
25.	ImpSS_7	I sometimes do "crazy" things just for fun.	0.446
26.	Act_8	I like to be active as soon as I wake up in the morning.	0.463

27.	Agg- Host_8	I can't help being a little rude to people I do not like.	0.510
28.	Sy_8	I am a very sociable person.	0.463
29.	ImpSS_8	I prefer friends who are excitingly unpredictable.	0.401
30.	N-Anx_8	I often feel like crying sometimes without a reason.	0.403
31.	Act_9	I like to keep busy all the time.	0.590
32.	ImpSS_9	I often get so carried away by new and exciting things and ideas that I never think of possible complications.	0.412
33.	N-Anx_9	I don't let a lot of trivial things irritate me	0.551
34.	Sy_9	I usually prefer to do things alone.	0.424
35.	N- Anx_10	I often feel uncomfortable and ill at ease for no real reason.	0.457
36.	Sy_10	I probably spend more time than I should socializing with friends.	0.410
37.	Act_10	When I do things, I do them with lots of energy.	0.515
38.	Agg- Host_8	When people shout at me, I shout back.	0.410

The EFA resulted with 38 items on five dimensions of personality traits. *Cronbach Alpha* coefficients were used to assess the reliability of dimensions of the scale. The reliability coefficients ranged from 0.606 to 0.647 (Table 4.14). These values suggested that the scales were reliable and could be used for further analysis.

**Table 4.14: Reliability coefficients of the retained dimensions (ZKPQ-50-CC)**

S. No.	Dimension	Item	Cronbach Alpha
1.	Activity (Act)	Act_1, Act_2, Act_3, Act_4, Act_5, Act_6, Act_7, Act_8, Act_9, Act_10	0.624
2.	Aggression Hostility (Agg-Host)	Agg-Host_3, Agg-Host_4, Agg-Host_6, Agg-Host_8, Agg-Host_10	0.606
3.	Sociability (Sy)	Sy_1, Sy_2, Sy_3, Sy_5, Sy_7, Sy_8, Sy_9, Sy_10	0.614
4.	Impulsive Sensation Seeking (ImpSS)	ImpSS_4, ImpSS_5, ImpSS_6, ImpSS_7, ImpSS_8, ImpSS_9	0.638
5.	Neuroticism Anxiety (N-Anx)	N-Anx_2, N-Anx_3, N-Anx_4, N-Anx_5, N-Anx_6, N-Anx_7, N-Anx_8, N-Anx_9, N-Anx_10	0.647
	ZKPQ-50-CC scale		0.802

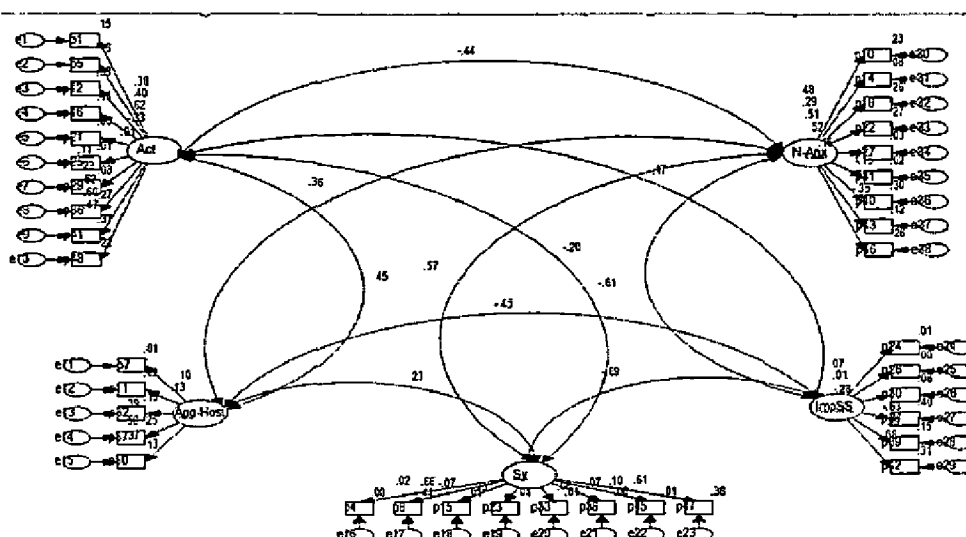
But before finally exploring the dimensions through EFA it was important to undertake confirmatory factor analysis based on the integrated model. A CFA with maximum likelihood method was performed over the variance-covariance matrix through the AMOS 16.0 statistical package (Arbuckle, 2007; Figure 4.3). The results from analyzing the model indicated a good fit of the five dimensions of *Activity (Act)*, *Aggression-Hostility (Agg-Host)*, *Sociability (Sy)*, *Impulsive Sensation Seeking (ImpSS)* and *Neuroticism-Anxiety (N-Anx)*. The value of CMIN/DF was 2.562, below the recommended value of 3.0 (Arbuckle, 2007). The RMSEA for the measurement model was .074. Browne & Cudeck (1993) suggested that a value less than .08 indicate a good model fit. Other fit indicated also point to a fair and acceptable model fit (NFI =.812, GFI = .894, CFI =.921). Table 4.15 provides the results for each of the fit indices of the CFA Measurement Model. Figure depicts the CFA Measurement Model.



**Table 4.15: CFA Measurement Model (ZKPQ-50-CC Scale)**

Fit Indices	Recommended level	Measurement Model
CMIN/df	<3.00 (Arbuckle, 2007; Byrne, 2001)	2.989
GFI	>.90 (Byrne, 2001; Hair et al., 1998)	0.876
AGFI	>.90 (Byrne, 2001; Hair et al., 1998)	0.832
NNFI	>.90 (Hu & Bentler, 1995)	0.838
CFI	>.90 (Bentler, 1992)	0.908
RMSEA	<.08 (Heene et al., 2011)	0.076

**Figure 4.3: CFA Measurement Model (ZKPQ-50-CC Scale)**



The measurements calculated above with the help of reliability analysis, exploratory factor analysis and confirmatory factor analysis report that the data collected from the refined ZKPQ-50-CC scale of 38 items fits with the hypothesized research model.

#### 4.9 Hypothesized Research Model

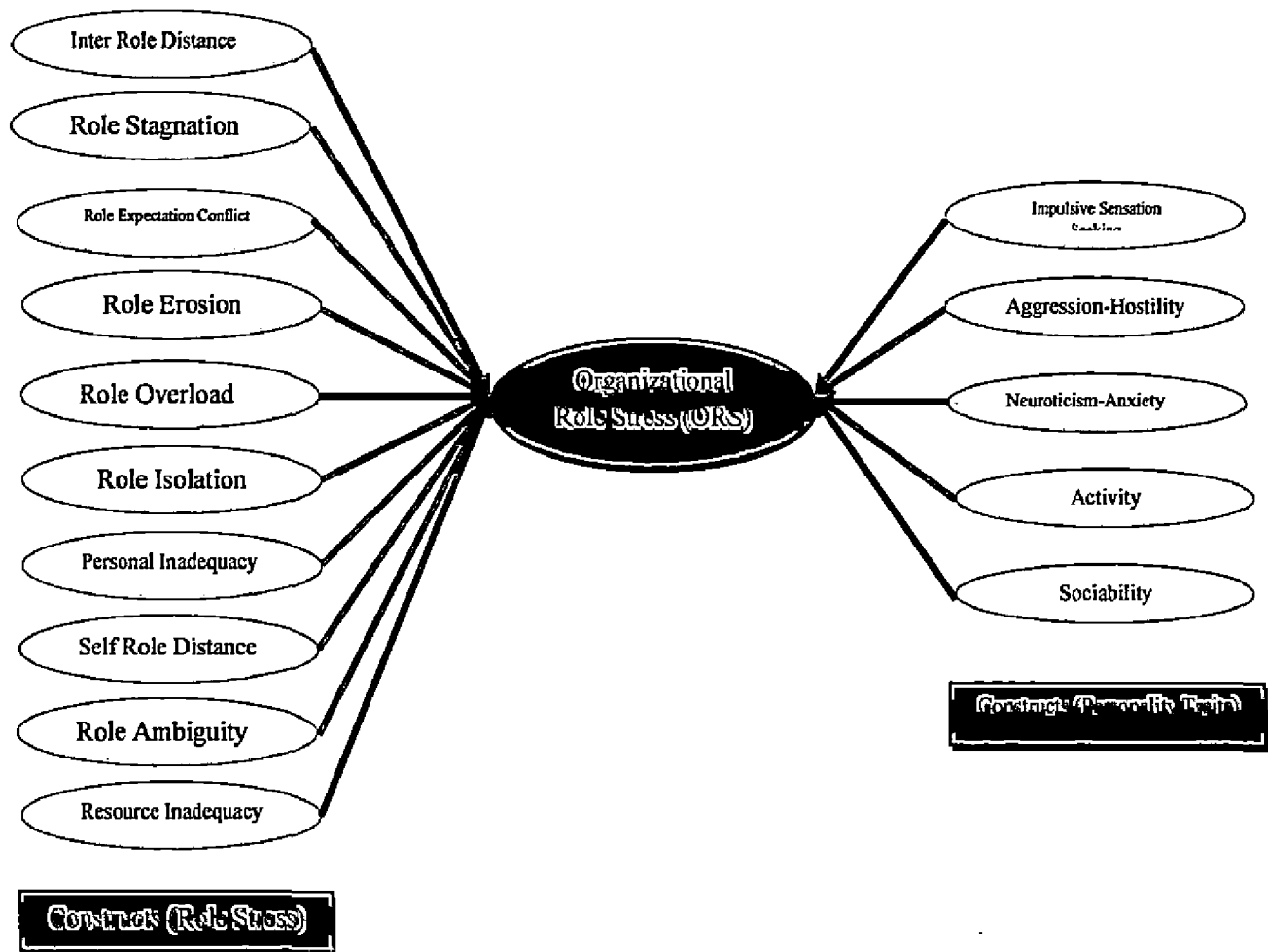
Research indicates that variables like *self-efficacy*, *self-esteem*, *locus of control*, *emotional stability*, *extraversion*, *conscientiousness*, *positive affectivity*, *negative affectivity*, *optimism*, *proactive personality* and *hardworking* impact highly on stress and burnout (Alarcon et al., 2009). However, limited studies exist exploring the relationship between personality variables and stress (Alarcon et al., 2009).

Studies have explored the role of personality traits in stressful life experiences and negative emotional outcomes (Bolger & Schilling, 1991; Bolger & Zuckerman, 1995). Personality plays a crucial role in health and psychological outcomes. Certain personality traits lower behavioral thresholds, rendering certain behaviors more likely and others less likely to occur (Bolger & Zuckerman, 1995). Stress response is one behavior affected by personality. Personality may trigger the stress process, starting from the evaluation of stress experience to the choice of coping strategies and ultimately to emotional outcome (Vollrath, 2001). Personality also influences how people react to stressful situations in their work place (George & Brief, 2004). Finally, it has been noted earlier that stress outcomes are partly determined by personality dispositions. Five broad personality dimensions have been identified as stable personality traits, namely; *Impulsive sensation Seeking, Aggression-Hostility, Neuroticism-Anxiety, Activity and Sociability* (Zuckerman et al., 1993; Aluja et al., 2006). The proposed research framework is presented in the figure 4.4.

#### 4.10 Pattern of Analysis

Descriptive statistics (e.g. mean) was used to measure the central tendency of the data. Two types of mean were calculated for the study- *Arithmetic mean* and *cumulative mean*. Again, for measuring dispersion of the data from mean value, *Standard Deviation* (S.D.) was used. For ascertaining the differences among different groups of police personnel, *t-test* and *analysis of variance* (ANOVA) were used. To explore the relationship between personality traits and stress, *correlation analysis* was used. In order to test the influence of personality traits on stress, *regression analysis* was undertaken with the help of *Structure Equation Modeling*. To analyze the responses collected through open-ended questionnaire, percentage analysis was used. The statistical analysis was carried out with the help of SPSS 18.0. The next section presents the major limitations of the study.

**Figure 4.4: Proposed Research Model**



#### 4.11 Limitations

Every study has its share of limitations. This study too has certain limitations. Important ones are presented below:

- The first limitation arises of its survey design. Survey research relies on self-report data, which may be inaccurate or manipulated by participants and/or environmental factors (Leedy & Ormrod, 2005). Additionally, the non-random selection of the subjects may influence the generalisability of the findings.
- Lack of response is a major limitation of the study. This study had a response rate of 23.44% only. It was difficult to get respondents' full cooperation because of their lack of interest in the study. They had doubts about the utility of the study. They were of the view that such studies hardly result in the betterment of police personnel. Often the support of the senior officers was

sought. Then, the respondent filled the questionnaire. Overall, a general apathy and hopelessness was observed among the respondents.

- Some of the respondents had genuine difficulty in understanding the way questionnaire was to be filled. The length of the survey questionnaire could potentially have created a bias in response due to the effects of fatigue. Other limitations such as measurement error, scaling issues, and non-response bias, may also have affected the current study.
- One major limitation of the study is non-inclusion of adequate representation of senior Gazetted officers. Efforts have been made for data collection from them but due to lack of time, they could not fill the questionnaire. However, they have supported the data collection in every possible manner. Another limitation of this study is that more males (87%) than females were included in the sample.
- Yet another limitation of the study is that it does not include more geographical area for study. It includes only seven districts of Uttar Pradesh.

The chapter has presented the research design and methodology. The study design included both quantitative and qualitative approaches. Data collection section included a discussion on population, sample size, and the survey procedure. In the scale refinement section, the details of scale refinement have been discussed. The section also describes a discussion on exploratory and confirmatory factor analysis. In the data analysis section, the statistical techniques used for analyzing the data are explained. In the end, the major limitations of the study are presented. The next chapter presents the findings of the research.

# *Chapter – 5*

## *Results & Discussion*

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## Chapter 5: Results and Discussion

The chapter presents the results of the data analysis. The data analysis has been carried out through various statistical techniques such as Independent sample t-test, ANOVA test, Correlation estimation and Structural modeling. Finally, results of the hypothesis are presented.

### 5.1 Overall Results on Stress

The study establishes that police personnel are experiencing organizational role stress (Table 5.1). The mean score for total ORS is 2.11 while the absolute value of ORS is 105.65. This score is fairly high. Around half of the respondents are experiencing high medium stress. The level of stress on seven stressors namely *Inter Role Distance*, *Role Stagnation*, *Role Erosion*, *Role Overload*, *Role Isolation*, *Self Role Distance* and *Resource Inadequacy* is well above the theoretical average of two.

As far as individual stressors are concerned, *Inter Role Distance* (IRD) emerged as the most potent stressor with a mean score of 2.711 (Figure 5.1). The standard deviation on this account is 0.96. This shows that police personnel are experiencing high Inter Role Distance (IRD). Police personnel are often living away from their families. Grant of leave on time is major cause of concern for them. Those who are living with their family don't spend enough time with family due to the nature of job. Policing is a 24 hours job. Therefore demands of the family are often incompatible with the demands of job. As a result, families of police personnel usually get neglected. This conflict between the family's needs and demands of the job is a potent cause of stress among police personnel. These results are in line with the findings of previous studies done on work-family conflict such as Burke (1988), Burke & Greenglass (1987), Jackson & Maslach (1982), Stephens & Sommer (1995). These studies also reported that work-family conflict is the major reason of stress and burnout among police personnel.

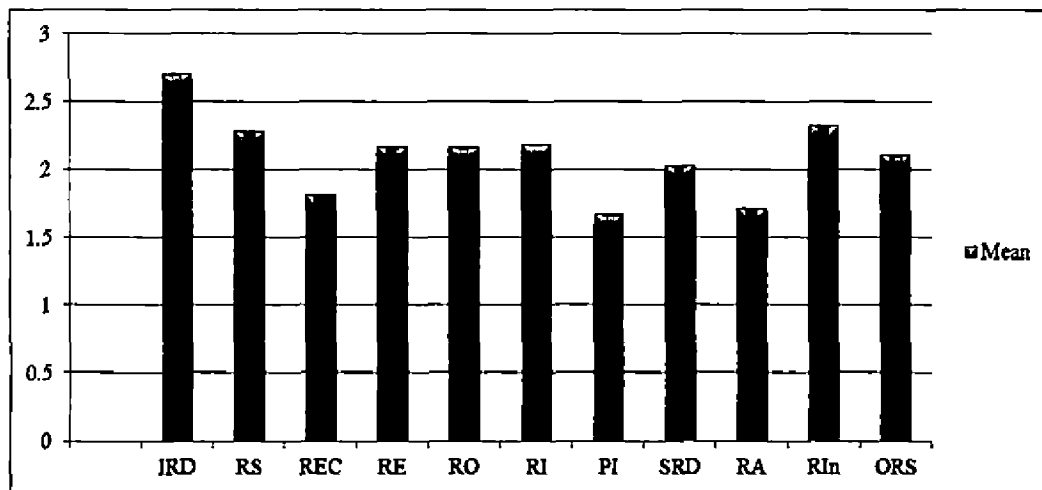
**Table 5.1: ORS Scores for Police Personnel**

Stressors	Absolute Score		Mean Score		Rank	Low Stress		Low Medium Stress		High Medium Stress		Very High Stress	
	Cumulative	SD	Mean	SD		No.	(%)	No.	(%)	No.	(%)	No.	(%)
IRD	13.55	4.8	2.71	0.96	1	33	6.60	92	18.4	122	24.4	253	50.6
RS	11.45	5.0	2.29	1.01	3	75	15.0	134	26.8	180	36.0	111	22.2
REC	9.05	4.5	1.81	0.91	8	111	22.2	202	40.4	140	28.0	47	9.4
RE	10.85	3.9	2.17	0.79	5	39	7.8	189	37.8	211	42.2	61	12.2
RO	10.85	5.3	2.17	1.07	6	102	20.4	120	24.0	168	33.6	110	22.0
RI	10.95	5.1	2.19	1.02	4	75	15.0	159	31.8	169	33.8	97	19.4
PI	8.40	4.4	1.68	0.89	10	140	28.0	208	41.6	128	25.6	24	4.8
SRD	10.15	4.5	2.03	0.90	7	85	17.0	173	34.6	176	35.2	66	13.2
RA	8.55	5.0	1.71	1.00	9	148	29.6	175	35.0	132	26.4	45	9.0
RIn	11.65	4.8	2.33	0.97	2	61	12.2	138	27.6	203	40.6	98	19.6
ORS	105.65	35.5	2.11	0.71		40	8.0	161	32.2	244	48.8	55	11.0

In order to probe this issue further, the scores obtained on various stressors were classified in four categories. These four categories were low scoring group (0-1.0), low medium stress group (1.1-2.0), medium high stress group (2.1-3.0), and the very high stress group (3.1-4.0). The data analyzed revealed that 59.8% of the respondents are experiencing of either medium high or very high stress.



**Figure 5.1: Scores on various stressors**



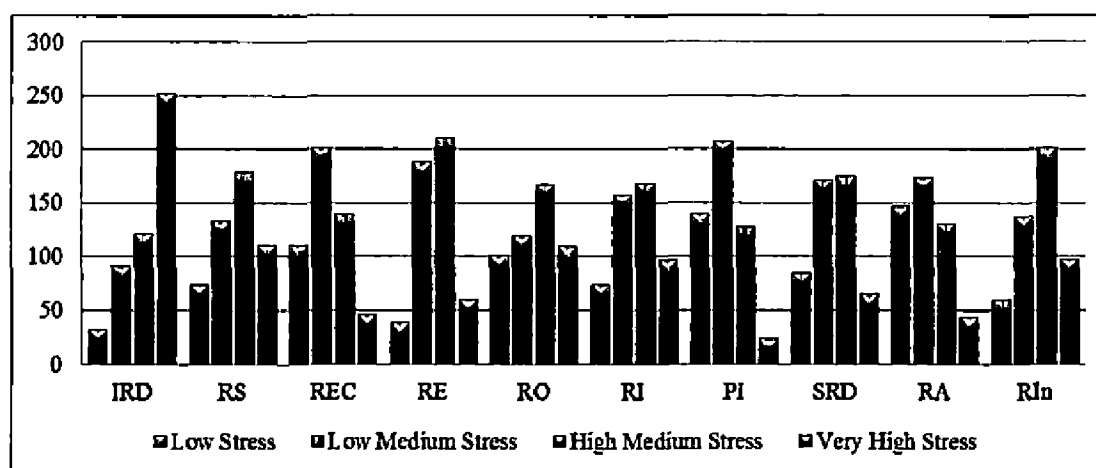
The second most potent stressor for police is *Resource Inadequacy* (RIn) with a mean value of 2.332. The police personnel experience non-availability of the resources required for performing the role effectively. These resources may be in terms of finance, information, people, material, infrastructure, accommodation and other facilities. They do not have sufficient sources of information. The technology is often outdated. Researcher's visit to the rural areas brought out lack of facilities in rural police stations specially. Recently, a newspaper reported that Uttar Pradesh has an overwhelming vacancy of 60% in its police force against the country average of 25% even as it recorded the highest number of crime cases in any state in India (Hindustan Times, 22.04.2012). This reveals the need of additional police force at every police station in India. Police is called upon to maintain the law and order situation on very wide areas with very limited number of cops. Most of the police stations in India are substandard from infrastructure's point of view. Even, accommodation facility is less than expected. Only 5.40 lakhs family quarters were available for over 16.40 lakhs police personnel in the country (BPR&D, 2011). Approximately 4-5 police cops have to share one room in the barracks of police stations as well as police lines. These inadequacies become the source of stress for police personnel. They act as hurdles in smooth and effective operations.

The third major stressor for police personnel is *Role Stagnation* (RS). This study reports mean score of 2.292 on this account. This suggests that there are fewer opportunities for growth in the role of police personnel. It indicates that police

personnel feel stuck in the same role. Police organization is unique in the sense that it has a narrow top with a very wide base. Most of the police constables retire at the same level after 35-40 years of job. Thus, the opportunities for career advancement are very few and limited. In addition, there is a *perceived feeling of lack of fairness* and objectivity in the promotional process. *Unfair discipline, policies* and *promotion* often diminish values and self-esteem in police officers who wholly invest themselves in the police work (Gilmartin, 2002). These factors generate stress among police personnel.

In addition to three most potent stressors, intensity of stress is also analyzed. The dispersion of the data (Figure 5.2) helps us understand the nature of stress and its intensity in police personnel. The overall stress table shows that 11% (N=55) police personnel are experiencing high stress level, 48.8% (244) are among High-Medium stress level, 32.2% (N=161) are experiencing low-medium stress and remaining only 8% (N=40) are reported in low stress group. Thus, it is evident that around half of the police personnel are facing high-medium stress. This has dangerous portents. It has serious implications for maintaining law and order in the country. It is also noteworthy here that 253 (50.6%) police personnel are facing very high Inter Role Distance (IRD). Apart from Inter Role Distance, the police personnel have also reported very high stress on Role Stagnation (N=111) and Role Overload (N=110).

**Figure 5.2: Distribution of respondents as per intensity of stress**



The analysis above buttresses the need of remedial steps to manage stress among police personnel. The increasing suicide rates among police, increasing crime

rates and ineffectiveness of force due to frustration and stress among them is expected to become even more severe. The performance of police impacts wide array of sectors. Poor internal health of the organization is detrimental to overall health of the society.

The results of data analysis discussed above are explaining the nature and intensity of stress among police personnel. The most potent stressors identified by police personnel are *Inter Role Distance (IRD)*, *Resource Inadequacy (RIIn)* and *Role Stagnation (RS)*. It is also evident from dispersion analysis that half of the police personnel are experiencing high medium stress. The statistics are reporting wide variations in stress level of police personnel as per individual stressors and intensity. Analysis revealed that police personnel are experiencing different stress in nature as well as in intensity. Thus, null hypothesis  $H_01$  stating that *there is no difference in the nature and intensity of stress among police personnel is rejected*.

#### **5.1.1 Analysis across Occupational Groups**

The total ORS score for the study is 105.65. This is a relatively high score as compared to 36.79 for IAS officers (Pestonjee, 1987), 72.8 for women university workers (Pareek, 1981), 69.10 for public sector employees (Srivastav, 1997), 60.31 for teachers (Joshi & Singhvi, 1997), 61.24 for working women (Mathur, 1997), 73.86 for CRPF police officers (Singhvi & Mathur, 1997), 81.03 for police personnel (Mathur, 1999), 92.47 for police personnel (Talib, 1999) and 73.63 for clinical surgeons (Ahmady et al., 2007) but slightly low to 108.08 for paramilitary police personnel (Rai & Khurana, 2006).

Comparison of ORS scores of the police personnel obtained in this study, with other studies carried out among varied occupational groups help understand the magnitude and intensity of stress among police cops. To compare the present study of ORS scores with other studies carried out among varied occupational groups, the cumulative scores of stressors are used as described in Table 5.1.1.

Table 5.1.1 presents comparative ORS scores of Police (Talib, 1999); *public, private, government and university* sector employees (Talib, 2002), *Information technology professionals* (Aziz, 2002); *Insurance Sector Professionals* (Quadir, 2005); *Coal industry employees* (Prasad, 2007); *Healthcare professionals* (Rashid, as per personal communication) with the present study.

The analysis revealed the fact that police personnel are experiencing comparatively high organizational role stress (105.65) as compared to other occupational groups. IRD emerged as a leading stressor for all the organizational groups but differences have been found on other stressors. The analysis indicated that coal sector employees are experiencing least ORS (40.96) followed by university employees (45.85) while police personnel are experiencing highest stress followed by healthcare professionals (95.46). The discussion revealed that nature and quantum of stress among police personnel vis-à-vis other occupational groups is different.

Thus, null hypothesis  $H_{01a}$  stating that *there is no difference in the nature and quantum of stress among police personnel vis-à-vis other occupational groups is rejected.*

**Table 5.1.1: Comparison across other Occupational Groups**

Researchers		Talib	Aziz	Quadir	Talib	Talib	Talib	Talib	Talib	Prasad	Rashid	Bano (present)
Occupational Groups		Police	IT Professionals	Insurance Sector	Public Sector	Private Sector	Govt. Sector	Univ. Sector	Coal Industry	Healthcare professionals	Police	
Stressors	Sample	N=178	N=257	N=328	N=132	N=205	N=128	N=82	N=262	N=300	N=500	
	Mean	12.04	8.27	6.61	7.25	7.67	7.66	7.34	5.29	10.43	13.55	
IRD	SD	4.71	3.92	4.75	5.00	4.81	4.73	4.75	3.80	4.40	4.80	
	Mean	9.51	8.83	4.52	5.62	7.29	6.30	5.13	3.62	9.45	11.46	
RS	SD	5.03	4.03	3.98	4.63	4.53	4.92	4.03	3.18	4.70	5.05	
	Mean	8.67	5.84	4.05	4.44	5.57	5.10	5.24	3.24	8.64	9.09	
REC	SD	4.31	3.54	3.42	3.75	4.03	4.13	3.82	2.74	4.46	4.55	
	Mean	10.76	7.41	8.54	8.09	7.68	8.65	6.81	6.83	9.46	10.89	
RE	SD	4.24	3.47	3.75	3.91	3.81	4.77	4.22	3.00	4.20	3.95	
	Mean	7.35	7.56	3.62	4.25	5.80	5.09	5.25	2.90	10.00	10.86	
RO	SD	5.09	3.79	3.62	3.95	4.64	5.02	4.18	2.90	4.57	5.35	
	Mean	10.03	4.76	5.60	6.21	6.62	7.08	5.63	4.48	9.05	10.96	
RI	SD	4.22	3.20	3.47	3.50	3.60	4.69	3.30	2.78	4.11	5.10	
	Mean	6.98	7.79	5.58	6.33	6.71	5.00	4.70	5.58	9.36	8.41	
PI	SD	4.75	4.07	4.42	4.73	4.14	4.74	4.39	3.54	4.43	4.45	
	Mean	8.37	5.84	5.17	5.65	6.14	6.11	4.64	4.14	10.00	10.19	
SRD	SD	4.57	3.02	4.01	4.06	3.90	4.84	3.70	3.21	4.72	4.50	
	Mean	7.70	4.89	2.93	3.44	4.29	4.36	2.58	2.34	9.03	8.59	
RA	SD	4.47	3.01	3.25	3.58	4.36	4.48	2.98	2.60	5.38	5.00	
	Mean	11.06	8.96	4.71	5.78	6.70	7.60	5.82	3.77	10.04	11.66	
Rln	SD	4.05	3.38	4.07	4.10	4.33	5.16	3.84	3.26	4.36	4.85	
	Mean	92.47	70.16	51.2	57.11	64.59	63.01	45.85	40.96	95.46	105.65	
ORS	SD	29.88	16.47	27.26	28.83	31.15	35.44	24.11	21.81	35.87	35.50	

Source: Talib (1999, 2002), Aziz (2002), Quadir (2005), Prasad (2007), Rashid (as per personal communication).

### 5.1.2 Analysis across Type of Organization

The study was carried out on two groups of police personnel namely, *Civil Police (CP)* and *Armed Police (AP)*. In this study, Civil Police emerged as more stressed group between the two. The mean ORS score for Civil Police was 2.21 as compared to 1.88 for Armed Police. As regards specific stressors, IRD emerged as the dominant stressor among both the groups. The data analysis revealed that CP is more stressed group on all ten stressors. In order to ascertain the significance of difference amongst these two organizations, independent sample t-test was calculated. Significant differences were observed on total ORS between these two groups. Significant differences have been reported on all the stressors also except REC, PI and RA (Table 5.1.2).

**Table 5.1.2: Scores across Type of Organization**

Stressors	Mean		SD		t-value	p-value
	CP	AP	CP	AP		
IRD	2.94	2.20	0.85	1.00	8.646	.000**
RS	2.41	2.03	1.00	0.98	3.983	.000**
REC	1.86	1.71	0.90	0.93	1.715	.087
RE	2.24	2.04	0.79	0.75	2.600	.010**
RO	2.30	1.87	1.04	1.09	4.245	.000**
RI	2.35	1.83	1.01	0.93	5.451	.000**
PI	1.72	1.58	0.88	0.90	1.692	.091
SRD	2.11	1.86	0.90	0.88	2.889	.004**
RA	1.74	1.66	0.97	1.05	0.806	.421
RIIn	2.46	2.04	0.93	0.98	4.647	.000**
ORS	2.21	1.88	0.69	0.70	4.965	.000**

Let us understand these differences between these two groups. *Inter Role Distance* emerged as the most potent stressor for both Civil Police and Armed Police. The mean value of IRD for CP is 2.94 while for AP, it is 2.20. It shows that civil police personnel are experiencing nearly very high IRD. It was reported by 88% of the civil police personnel surveyed that they live away from their family. Due to the nature of the duty, civil police personnel even don't get time to be with their

family. When the data was collected, the then government of UP evolved a 'Transfer' scheme for UP police. As per the scheme police personnel were posted around 200 Km away from their home district and they could be transferred any time. In informal interaction with the researcher, their constant refrain was *non grant of leave*. They reported that they do not get leaves when they need it most. As a result, they miss out important social occasions back at their homes. This has made them socially isolated too. The CP personnel reported that their relatives have cut-off relations with their families. In contrast, most of the Armed Police Personnel stay with their family. If they are away from the family, they have an opportunity to come back and be with their family because the problem of leave sanction is not so severe for this group. Nevertheless, Inter Role Distance stress among this group is also quite high.

Significant difference was observed on *Role Stagnation* (RS) also. Civil police personnel feel stuck in the same role. It was reported by most of CP personnel that they did not get a single promotion in their entire tenure of service. Armed police also feel stress due to the stressor but this stress is low in intensity as compared to civil police. The reason may be the age of the respondents. The civil personnel surveyed were from all age groups and many of them were in last stage of their career. Thus, they might have felt the Role Stagnation more than armed police personnel who were in early years of their services as most of the armed police personnel surveyed were young. However, because of the situation, they also reported Role Stagnation as they feel their career advancement opportunities are very few and limited.

Another stressor on which significant differences have been observed in these two groups is *Role Overload* (RO). CP personnel are facing high medium stress while AP personnel are facing low medium stress on this account. It is in a way obvious. CP personnel have to work round the clock. Due to shortage of force in India, CP personnel are expected to work 24 hours in a day in order to maintain order. The police population ratio is decreasing while the crime rate is increasing day by day. New types of crimes have surfaced. Police personnel have to handle all types of crimes. Another work load on CP personnel is excessive paper work. In addition, public expects policeman to act as a superhero as portrayed in *Hindi movies*. Thus,

CP personnel feel Role Overload. On the other hand, AP personnel do not experience such work overload.

Difference has been observed on *Role Isolation* (RI) as well among two groups. CP personnel feel lack of communication within the police department horizontally as well as vertically. This is due to the environment of low trust, low supportiveness and low interest in handling the problems. AP personnel do not feel Role Isolation in such a strong way. They reported that overall ambience is better in reserve police lines than in police stations.

The scores on *Self Role Distance* (SRD) are also significantly different for these two groups. As discussed earlier, SRD represents a conflict between the self concept and the expectation from the role as perceived by the role occupant. Again, CP personnel are more stressed than AP personnel. This finding is quite significant from the point of view of morale of the force and resultant job performance. Findings indicate that CP personnel have not adjusted well in the job. They find a mismatch between their value system and self concept and the demands of the job.

Difference has been observed on *Resource Inadequacy* (RIIn) as well. Both the groups face high medium stress on Resource Inadequacy. But, again, CP personnel are more stressed. CP personnel face the difficulties in smooth operation due to lack of finance, information, people and other facilities. The infrastructure and accommodation facilities also are inadequate. Armed Police also encounter this stressor but to less extent because they find more facilities than civil police. Their job is also different as they do not deal directly with public.

Thus, the null hypothesis  $H_{01b}$  stating that *there is no difference in quantum and type of stress between civil police and armed police is rejected for overall organizational role stress. In individual stressors category it is rejected for all stressors except Role Expectation Conflict (REC), Personal Inadequacy (PI) and Role Ambiguity (RA).*

### **5.1.3 Analysis across Rank**

As described earlier, study did not include enough senior police officers. In spite of the limitation, the analysis unveils significant differences among *Lower, Middle* and *Senior* level police personnel. Staff at the lower level forms the base of the



pyramid of police force. They scored significantly higher on total ORS. They come out as more stressed than the officers under whom they serve. Non-Gazetted police officers (middle level) are experiencing medium level of stress while the senior officers are least stressed. It is also noteworthy that significant differences have been observed on all stressors on the basis of ranks among police personnel (Table 5.1.3).

On the basis of rank, difference has not been observed on *Inter Role Distance* ( $F=4.434$ ,  $p=.012$ ). But, IRD again emerged as the most potent stressor for all hierarchal levels. It means that all the police personnel irrespective of their ranks are experiencing Inter Role Distance. It was further reported that on IRD, middle officers are relatively more stressed (Mean=2.89) than lower rank police personnel (Mean=2.69) and senior officers (Mean=1.90). Significant difference has been observed with respect to *Role Stagnation* across rank. High score on Role Stagnation among lower level is understandable. As discussed earlier, police organizational structure has a wide base with a very narrow top. Thus chances of promotion of lower level personnel to the next higher ranks are far and few. Police constables often start and retire at the same level. On the other hand, senior officers don't feel Role Stagnation while middle level officers face moderate Role Stagnation.

**Table 5.1.3: Scores across Rank**

Stressors	Mean			SD			F-value	p-value
	A (N=408)	B (N=48)	C (N=8)	Lower	Middle	Senior		
IRD	2.69	2.89	1.90	0.97	0.87	0.80	4.434	.012*
RS	2.35	2.08	1.06	0.97	1.10	0.88	8.684	.000**
REC	1.90	1.48	1.00	0.89	0.92	0.72	10.994	.000**
RE	2.22	2.00	1.57	0.78	0.74	1.18	5.060	.007**
RO	2.22	2.02	1.00	1.04	1.17	0.79	6.054	.003**
RI	2.28	1.84	1.28	0.98	1.08	0.88	10.141	.000**
PI	1.78	1.28	0.40	0.84	0.94	0.75	20.940	.000**
SRD	2.14	1.65	0.75	0.87	0.88	0.62	19.829	.000**
RA	1.84	1.23	0.37	0.96	0.97	0.74	21.845	.000**
RIn	2.41	2.02	1.25	0.94	0.99	0.88	11.150	.000**
ORS	2.18	1.85	1.06	0.67	0.76	0.65	17.562	.000**

(Note: A- Lower rank, B-Non-Gazetted or Middle rank, C- Gazetted or Senior rank)

Significant differences on *Role Expectation Conflict* have also been observed among various ranks but REC is not severe in all three levels. Lower rank police personnel face Role Expectation Conflict more. As a law enforcer, they are expected to act as a friend and helper, while at the same time they have to use force to get their job done. These types of situations create Role Expectation Conflict. Lower rank police personnel also encounter conflicts due to ambiguous expectations of the seniors and their own. In contrast, senior officers and middle level officers do not face Role Expectation Conflict in that intensity. While interviewing the lower ranked police personnel, the researcher experienced that senior officers are prone to give orders to their subordinates without enough consideration to feelings of the subordinates. Differences have been reported on Role Erosion also. Here, again lower officers experience more RE due to the feeling of lack of enough challenges in the functions assigned in their role. The lower ranked personnel reported that they want more challenge in their job. Middle officers feel moderate Role Erosion while senior officers do not feel stress on this account.

While comparing the present results with the previous research, the results are found to be similar to the studies of Brown & Campbell (1994), Singhvi & Mathur (1997), Kirkcaldy et al. (1995), Talib (1999), Lord (2005) and Pienaar & Rothmann (2005) which reported that lower ranking police personnel are more stressed than higher ranking police personnel. However, the results of the present study are contrary to the studies of Pienaar & Rothmann (2006), Miller et al. (2009), reported higher the rank, higher the stress and Pienaar (2002), Ortega et al. (2007), Storch & Panzarella (1996), Buker & Wiecko (2006) which reported no significant difference in stress level as per ranks among police personnel.

Thus the hypothesis  $H_{01c}$  stating that *there is no difference in quantum and type of stress among police as per their rank is rejected for overall organizational role stress (ORS) as also for ten constituent stressors of ORS scale.*

#### **5.1.4 Analysis across Marital Status**

This study reported no significant difference in the overall stress level between *married* and *unmarried* police personnel ( $t=0.241$ ,  $p=.809$ ). But, significant differences have been observed on only one individual stressor i.e. *Personal*

*Inadequacy* (PI). Married police personnel reported more Personal Inadequacy than their unmarried counterparts ( $t=2.744$ ,  $p=.006$ ) (Table 5.1.4). This may be due to the time factor. Married police personnel have to shoulder additional responsibilities of the family. Unmarried police personnel can enhance their skills and qualifications by participating in various training programs. The lack of time for such activities might have created a feeling of Personal Inadequacy among married police personnel.

**Table 5.1.4: Scores across Marital Status**

Stressors	Mean		SD		t-value	p-value
	Married (N=465)	Unmarried (N=35)	Married	Unmarried		
IRD	2.69	2.98	0.97	0.73	-1.731	.084
RS	2.29	2.22	1.01	0.94	0.427	.670
REC	1.83	1.65	0.92	0.81	1.119	.264
RE	2.17	2.24	0.79	0.74	-0.515	.606
RO	2.18	1.94	1.09	0.84	1.270	.205
RI	2.19	2.22	1.03	0.88	-0.165	.869
PI	1.71	1.28	0.90	0.64	2.744	.006**
SRD	2.04	2.01	0.91	0.75	0.180	.857
RA	1.71	1.74	1.00	0.99	-0.161	.872
RIn	2.31	2.54	0.98	0.82	-1.331	.184
ORS	2.11	2.08	0.72	0.52	0.241	.809

The findings of the present research supplements the results of studies carried out by Storch & Panzarella (1996), Maslach & Jackson (1985) and Maslach et al. (2001) that reported no significant relationship of marital status and stress level of employees. On the other hand, the findings are different from the results of Spielberger et al. (1981), Van Wyk (2005), Wheatley (2009) and Gamlin (2010) that reported married persons more stressed than unmarried. The findings are also contrary to Landa et al. (2008) that opined that married personnel were less stressed than unmarried group.

Thus the hypothesis  $H_{01d}$  stating that *there is no difference in quantum and type of stress between married and unmarried police personnel is not rejected for overall organizational role stress. As regards individual stressors, it is rejected for Personal Inadequacy (PI).*

### 5.1.5 Analysis across Gender

Comparative analysis across gender indicated female staff as more stressed group than male staff ( $t=1.672$ ,  $p=.095$ ). Across individual stressors, significant differences have been observed among these groups on **IRD** ( $t=3.732$ ,  $p=.000$ ), **RS** ( $t=3.015$ ,  $p=.003$ ), **RO** ( $t=2.791$ ,  $p=.005$ ), **RI** ( $t=2.512$ ,  $p=.012$ ) and **RIn** ( $t=2.937$ ,  $p=.003$ ) (Table 5.1.5).

**Table 5.1.5: Scores across Gender**

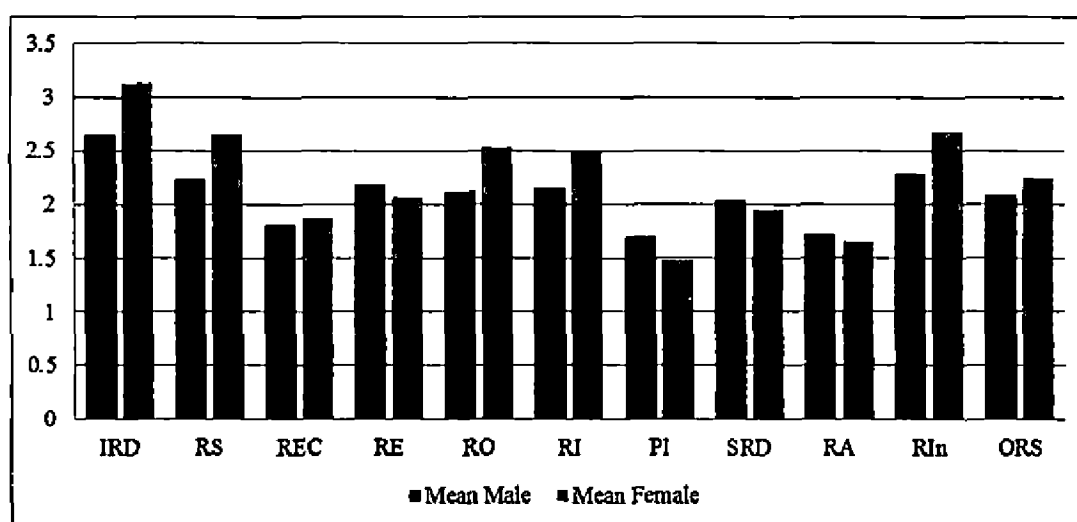
Stressors	Mean		SD		t-value	p-value
	Male (N=439)	Female (N=61)	Male	Female		
<b>IRD</b>	2.65	3.13	0.98	0.69	-3.732	.000**
<b>RS</b>	2.24	2.65	1.04	0.62	-3.015	.003**
<b>REC</b>	1.81	1.87	0.95	0.57	-0.548	.584
<b>RE</b>	2.19	2.07	0.81	0.60	1.128	.260
<b>RO</b>	2.12	2.53	1.11	0.72	-2.791	.005**
<b>RI</b>	2.15	2.50	1.04	0.72	-2.512	.012*
<b>PI</b>	1.70	1.49	0.92	0.74	1.781	.075
<b>SRD</b>	2.04	1.95	0.92	0.74	0.742	.459
<b>RA</b>	1.72	1.66	1.03	0.76	0.402	.688
<b>RIn</b>	2.28	2.67	1.00	0.58	-2.937	.003**
<b>ORS</b>	2.09	2.25	0.74	0.44	-1.672	.095

The analysis revealed that all police personnel are experiencing *Inter Role Distance*. But female police personnel reported very high Inter Role Distance (Mean=3.13; Figure 5.3). This may be due to traditional culture of the country like India. While interviewing female police personnel, it emerged that females are expected to fulfill their homely responsibilities first. Even when a lady joins a job, she continues to shoulder family responsibilities. She has to do both the jobs. In the present study, mostly married women participated. Married women personnel are more prone to stress and encounter problems as their adjustment to the police environment is relatively low. This may be because married women personnel try to strike a balance between their domestic and professional roles which is very difficult as the job of a police officer requires long work hours. Women police personnel are also experiencing problems while maintaining a balance between family work and office work. Females particularly belonging to nuclear families are the worst affected. Their adjustment pattern in the police environment is poor. This is due to the fact that there is no extra help available in a nuclear family to

undertake family chores and look after the children. Thus women feel that they don't have time to spend with their families and they are not fulfilling their family responsibilities in right earnest due to their long working hours.

Significant differences have also been observed on *Role Stagnation* (RS). As discussed earlier, entire police department especially lower rank is experiencing the feeling of being stuck in the same job but the study further reported that females are facing Role Stagnation more than male employees ( $t=3.015, p=.000$ ). Garcia (2003) argued that females are promoted easily than males but this Role Stagnation is due to being a woman. The presence of women in the police force is particularly opposed by men as police work is stereotypically considered a male occupation (Morash et al, 2006). Women police face a constant hostility "in the job" from fellow policemen who try to maintain control and dominance at the work place. Men perceive women police as weak individuals with no real ability for law enforcement (He et al., 2005). This type of feeling becomes the hurdle in promoting women in police department.

**Figure 5.3: Scores across Gender**



The women police were also experiencing *Role Overload* (RO) more than men police ( $t=2.791, p=.005$ ). The reason has been already discussed that women police officers have to fulfill both responsibilities of job as well as home. On the job, they have to work with more efforts, patience, concern and understanding to reduce the sexist mindset of the people (Rabe-Hemp, 2008). At home, they have to care their family members and children. Thus they feel Role Overload all the

time. Women police personnel feel more *Role Isolation* (RI) than male police personnel. Temperamentally females are more emotional and social than male (Sarafino, 2002). When they join police force, they feel lack of communication, atmosphere of lack of trust and support within the staff. In addition to it, women police also reported that they feel socially isolated due to their work schedule. Significant difference has been reported on *Resource Inadequacy* (RI<sub>n</sub>) as well. Women police personnel feel more Resource Inadequacy than their male counterparts ( $t=2.937, p=.003$ ). Women police face scarcity of resources in terms of people, information, finance and infrastructure. As discussed earlier, the strength of women police is less than required. Usually, there is only one female police station in every district. The condition of these female police stations is pathetic. During researcher's personal visits to these *mahila thanas*, she found limited sitting and accommodation facilities. In informal interaction with these female police personnel, it was reported that funds are not sanctioned proportionately for the female police stations. The researcher also observed lack of advance facilities and automation during her personal visits to these stations. Overall, female police personnel reported experiencing many difficulties in police department. The present study corroborates the previous studies of He et al. (2005), McCarty et al. (2007) and Morash et al. (2006) that reported higher levels of work-related stress in female police officers than their male colleagues. The present study also supports the studies carried out by Pendrgrass & Ostrove (1984), Weisheit (1987), Wexler & Logan (1983), Burke & Mikkelsen (2005), Berg et al. (2005), and Van Wyk (2005) which reported that female police officers were more prone to physiological stress response, feeling more isolated and hostile, discrimination and sexual harassment than their male counterparts. But, the results of the present study are contrary to the studies of Davis (1984) which reported no significant difference in stress between male and female police officers; Norvell et al. (1993) and Bradway (2009) which reported male police personnel were more stressed than females; and Swanepoel & Pienaar (2004) and Pole et al. (2001) which reported males police personnel had more suicidal ideation than females. While comparing with the Indian studies, results are similar to the studies of Krishnamurthi (1995) and Bhardwaj (1999) which reported

women police personnel are more stressed than men and more dissatisfied with their status and role despite their valuable contribution in both traditional and modern areas of police work.

Thus the hypothesis  $H_{01e}$  stating that *there is no difference in quantum and type of stress between male and female police personnel is not rejected for overall organizational role stress. As regards individual stressors, it is rejected for Inter Role Distance (IRD), Role Stagnation (RS), Role Overload (RO), Role Isolation (RI), and Resource Inadequacy (RIn).*

#### 5.1.6 Analysis across Religious Affiliations

In the study, analysis has been carried out on the basis of religion as well. Overall, no significant difference has been noted on total role stress between two major religious groups. Thus it can be said that all the police personnel are experiencing same role stressors irrespective of their religion. Significant difference has been reported on *Role Ambiguity (RA)* i.e. ( $t=2.053$ ,  $p=.041$ ) (Table 5.1.6). The personnel professing Hinduism faith are facing more Role Ambiguity than their Muslim counterparts. While comparing the results with existing literature, very limited research work has been found on the role of religion on police stress. The two studies reviewed on the subject, namely Sigler & Thweatt (1997) and Ursitti (2011) reported a positive relationship between religiosity, spirituality and stress.

**Table 5.1.6: Scores across Religious Affiliations**

Stressors	Mean		SD		t-value	p-value
	Hindu (N=443)	Muslim (N=57)	Hindu	Muslim		
IRD	2.69	2.85	0.96	0.99	-1.205	.229
RS	2.27	2.39	1.01	1.03	-0.847	.397
REC	1.82	1.79	0.92	0.84	0.222	.824
RE	2.17	2.20	0.76	0.99	-0.246	.806
RO	2.15	2.28	1.08	1.03	-0.859	.391
RI	2.20	2.12	1.04	0.80	0.525	.600
PI	1.69	1.60	0.90	0.82	0.650	.516
SRD	2.04	2.01	0.92	0.76	0.212	.832
RA	1.74	1.46	1.01	0.85	2.053	.041*
RIn	2.31	2.42	0.98	0.87	-0.782	.434
ORS	2.11	2.11	0.72	0.60	-0.048	.962

Thus the hypothesis  $H_{01f}$  stating that *there is no difference in quantum and type of stress between Hindus and Muslims is not rejected for overall organizational role*

stress. As regards individual stressors, it is rejected for all stressors except Role Ambiguity (RA).

### 5.1.7 Analysis across Age

Analysis across age revealed no significant difference on overall ORS (Table 5.1.7). Thus it can be inferred that all the police personnel across different age groups are experienced with the reality of stress in their job context.

**Table 5.1.7: Scores across Age**

Stressors	Mean				SD				F-value	p-value
	(A) (N=119)	(B) (N=97)	(C) (N=121)	(D) (N=163)	A	B	C	D		
IRD	2.65	2.73	2.68	2.76	0.97	1.03	0.98	0.89	0.347	.791
RS	2.25	2.18	2.33	2.35	1.01	1.05	1.05	0.95	0.753	.521
REC	1.77	1.76	1.83	1.87	0.77	0.98	0.98	0.92	0.438	.726
RE	2.27	2.09	2.20	2.14	0.73	0.79	0.82	0.79	1.141	.332
RO	1.96	2.30	2.15	2.25	0.97	1.06	1.11	1.11	2.327	.074
RI	2.21	2.26	2.11	2.20	0.96	0.98	1.01	1.09	0.422	.737
PI	1.64	1.78	1.68	1.64	0.80	0.84	0.91	0.96	0.557	.644
SRD	2.07	2.03	2.07	1.98	0.80	0.89	0.96	0.94	0.309	.819
RA	1.63	1.69	1.73	1.78	0.87	1.02	1.02	1.06	0.550	.648
RIn	2.37	2.37	2.39	2.22	0.96	0.96	0.92	1.01	0.924	.429
ORS	2.08	2.12	2.12	2.12	0.62	0.72	0.73	0.75	.087	.967

(Note: A- Lower age group, B- lower middle age group, C-middle senior age group, D-senior age group)

The present results supplements the earlier studies of Ortega et al. (2007) and Lambert et al. (2007) showing no significant difference in stress level of police personnel as per their age group. However, the results are contrary to the studies of Hunt & McCadden (1985) and Hoath et al. (1988) which reported that stress increased with advancement in the age of police personnel. In addition, present results are not in line with results of Forsyth & Copes (1994) and Miller et al. (2009) that reported that stress decreased as per the age of the police personnel.

Thus the hypothesis  $H_{01g}$  stating that *there is no difference in quantum and type of stress among respondents across age groups is not rejected*.



### 5.1.8 Analysis across Educational attainments

On the basis of qualification, three groups were formed. First group belonged to respondents who have passed up to intermediate, second category included graduates and third group was of post graduates and above. Analysis on the basis of qualification of the respondents revealed significant overall differences across educational categories ( $t=3.985$ ;  $p=.019$ ) and especially on four dimensions of *Role Stagnation (RS)*, *Role Expectation Conflict (REC)*, *Self Role Distance (SRD)*, and *Role Ambiguity (RA)*. It was evident that less educated police personnel are more stressed than moderately or highly educated personnel (Table 5.1.8).

**Table 5.1.8: Scores across Educational attainments**

Stressors	Mean			SD			F-value	p-value
	A (N=217)	B (N=214)	C (N=69)	A	B	C		
IRD	2.65	2.75	2.76	0.99	0.91	1.01	0.710	.492
RS	2.41	2.25	2.03	0.92	1.05	1.11	3.844	.022*
REC	1.99	1.72	1.54	0.88	0.86	1.06	8.344	.000**
RE	2.16	2.22	2.05	0.70	0.84	0.87	1.254	.286
RO	2.28	2.10	2.00	0.98	1.09	1.27	2.544	.080
RI	2.25	2.20	1.96	0.99	0.99	1.15	2.164	.116
PI	1.73	1.69	1.47	0.83	0.87	1.08	2.410	.091
SRD	2.10	2.04	1.78	0.78	0.94	1.09	3.375	.035*
RA	1.88	1.66	1.32	0.95	0.99	1.07	8.778	.000**
RIn	2.38	2.32	2.18	0.90	0.97	1.14	1.098	.334
ORS	2.18	2.10	1.91	0.63	0.71	0.87	3.985	.019*

(Note: A- Intermediate & below, B- Graduate, C- Post Graduate and above)

Significant differences have been found on *Role Stagnation (RS)* among respondents belonging to different educational groups ( $t=3.844$ ;  $p=.022$ ). Less educated police personnel had higher Role Stagnation. Due to limited education, their promotional prospects are even less. They usually end up doing the same monotonous work all-through their job time. On the other hand, more educated personnel find new challenges in their job due to their knowledge and skills. Significant differences have also been found on *Role Expectation Conflict (REC)* among different educational levels ( $f=8.344$ ,  $p=.000$ ). Again, less educated police personnel are experiencing more role expectation conflict than others. Due to lack of knowledge, less educated police personnel are not able to negotiate competing

demands. Many of the times, they don't find the way to solve the problems. They are poor decision-makers due to lack of understandings of the nitty-gritty's of the job. While, educated personnel are good decision makers. They can easily cope with the challenges and ambiguities inherent in their job due to their knowledge and skills. So they do not face Role Expectation Conflict in that proportion.

Another significant difference has been found on *Self Role Distance* (SRD) among different educational categories ( $t=3.375$ ;  $p=.035$ ). As described earlier, less educated personnel also face Self Role Distance more than other groups. This may happen due to lack of adjustment in the job. Significant difference has also observed on *Role Ambiguity* (RA) among different educational levels ( $t=8.778$ ;  $p=.000$ ). It represents the lack of clarity about expectations of others from the role. It may arise due to lack of information and understanding. As discussed above, less educated personnel have lack of understanding about their job profile. Additionally, they are called upon to do multiple duties apart from their own specific role. Thus, this ambiguity in work is a potential cause for Role Ambiguity among police personnel.

The results of the present research are contrary to most of the previous researches such as Worden (1990), Lambert et al. (2007) and Gerber et al. (2010) which reported no significant difference in stress level of police personnel as per their highest educational level. The results, too, do not support the studies of Ayres & Flanagan (1992), Band & Manuele (1999), Toch (2002) who noted higher stress as per higher educational level.

Thus, overall the null hypothesis  $H_0$  stating that *there is no difference in quantum and type of stress among respondents having different educational profiles is rejected. It is rejected specially for four individual stressors namely Role Stagnation (RS), Role Expectation Conflict (REC), Self Role Distance (SRD) and Role Ambiguity (RA).*

#### **5.1.9 Analysis across Length of Service**

For analysis on the basis of length of service or experience four groups were formed. The first group (length of service up to 10 years) was believed to be the initial *acclimatization phase*. In this phase, the new recruit got adjusted to the work environment of the organization. The next two groups comprised hard core

policing phase. The first group in this category was *early hard core policing phase* (length of service more than 10 years but up to 20 years). In this phase, the person learns the intricacies of the police work. It is presumed that this group has necessary verve and energy to get on with his job. The *late hard core policing phase* (length of service more than 20 years but up to 30 years) symbolized a period when having mastered the job, the incumbent may develop some complacency. The initial vigor and enthusiasm of using the job for achieving self-actualization might have waned. In the fourth phase (length of service more than 30 years) the incumbent is expected to be mentally getting *ready for impending retirement*. It is believed that stressors afflicting these four phases of job tenure would be different (Talib, 1999). Tenure wise analysis reported significant difference on overall role stress among these groups ( $t=2.971$ ,  $p=.031$ ). Overall, the police personnel having 11-20 years of experience reported highest stress followed by the personnel having 31-40 years of experience. Two specific stressors specially reported significant difference on this count, namely, *Role Overload* (RO;  $t=5.228$ ;  $p=.001$ ) and *Personal Inadequacy* (PI;  $t=3.479$ ;  $p=.016$ ). Significant differences have also been observed on *Role Isolation* (RI) (Table 5.1.9).

As regards *Role Overload* and *Personal Inadequacy*, the personnel belonging to early hard core policing were found facing more role conflicts than other groups. It may be possible that during the first phase of the career, with the help of energy and dedication, they had adjusted with the demands of the job. But after first phase, they are not able to cope well with the demands of the job. On the account of *Personal Inadequacy*, it may be possible that after their constant exposure to stressful situations in first phase of their career, they think they are less adequate for fulfilling the expectations of their role. They reported a need of extra training which may enhance their skills, knowledge and attitude to handle the adverse situations effectively.

The results of present research are partially supported by the existing literature (Barker, 1999; Savery et al., 1993; Patterson, 1992; Violanti & Aron, 1995; Naik, 2012) which reported that experience of stress and traumatic events declines with the experience of police work in comparison to younger and less experienced

police personnel. The results also partially in alignment with the study of Toch (2002) which reported that family related stress was more pronounced for older officers with more seniority as compared to their younger, less experienced colleagues.

**Table 5.1.9: Scores across Length of Service**

Stressors	Mean				SD				F-value	p-value
	A (N=129)	B (N=99)	C (N=131)	D (N=141)	A	B	C	D		
IRD	2.61	2.81	2.61	2.82	0.95	1.04	0.96	0.90	1.850	.137
RS	2.18	2.31	2.23	2.42	1.00	1.08	0.99	0.98	1.473	.221
REC	1.72	1.88	1.72	1.95	0.82	0.92	0.96	0.92	2.159	.092
RE	2.26	2.17	2.10	2.18	0.74	0.88	0.76	0.78	0.902	.440
RO	1.95	2.40	2.03	2.33	0.97	0.98	1.14	1.12	5.228	.001**
RI	2.09	2.43	2.08	2.21	0.97	0.95	1.00	1.10	2.830	.038*
PI	1.61	1.90	1.54	1.71	0.84	0.81	0.91	0.94	3.479	.016*
SRD	2.00	2.23	1.97	1.99	0.78	0.89	1.00	0.90	2.014	.111
RA	1.57	1.86	1.70	1.75	0.89	1.03	0.99	1.07	1.644	.178
RIn	2.30	2.54	2.20	2.32	0.97	0.89	0.94	1.03	2.456	.062
ORS	2.03	2.25	2.02	2.17	0.64	0.68	0.74	0.75	2.971	.031*

(Note: A- 1-10 years, B- 11-20 years, C- 21-30 years, D- more than 31 years)

Thus the null hypothesis  $H_{01e}$  stating that *overall there is no difference in quantum and type of stress among respondents having varied length of experience is rejected for overall organizational role stress. As per individual stressors, hypothesis is rejected for Role Overload (RO), Role Isolation (RI) and Personal Inadequacy (PI).*

#### **5.1.10 Analysis across Place of Posting**

Analysis across place of posting indicated that police personnel posted in rural areas as more stressed group. Total mean score for rural police is 2.32 as compared to 2.00 of urban police ( $t=4.851$ ;  $p=.000$ ).

Let us briefly understand the significant differences on various stressors between rural and urban police. First difference has been found on *Inter Role Distance* ( $t=5.914$ ;  $p=.000$ ). Rural police personnel are experiencing more IRD than urban police personnel. The reason behind this may be proximity to their families. Many of urban police personnel reported to presently living with their family while rural police personnel reported living away from the family due to lack of

accommodation facilities. Thus, they don't find adequate time to fulfill their familial responsibilities.

**Table 5.1.10: Scores across Place of Posting**

Stressors	Mean		SD		t-value	p-value
	Rural (N=166)	Urban (N=334)	Rural	Urban		
IRD	3.06	2.53	0.82	0.98	5.914	.000**
RS	2.49	2.19	1.07	0.96	3.193	.001**
REC	1.94	1.75	0.98	0.87	2.222	.027*
RE	2.28	2.12	0.84	0.75	2.078	.038*
RO	2.48	2.01	1.07	1.04	4.690	.000**
RI	2.51	2.03	1.10	0.93	5.130	.000**
PI	1.87	1.58	0.89	0.87	3.393	.001**
SRD	2.26	1.92	0.94	0.86	4.013	.000**
RA	1.81	1.66	1.04	0.97	1.522	.129
RIn	2.54	2.22	0.93	0.97	3.443	.001**
ORS	2.32	2.00	0.74	0.67	4.851	.000**

Rural police personnel face *Role Stagnation* (RS) more than urban police ( $t=3.193$ ;  $p=.001$ ). In rural areas, the nature of the work is monotonous. They mostly encounter the same job while urban policing offers more challenge than rural police. They reported participating in various sports activities as well. Rural police also reported experiencing *Role Expectation Conflict* (REC) more than urban police ( $t=2.222$ ;  $p=.027$ ). As regards relationship of police personnel with the general public, researcher observed that rural police creates and maintains better relationship than urban police. It may be relatively difficult for rural police personnel to fulfill the conflicting expectations of the public and professional obligations to their organizational role.

Significant difference has also been observed on *Role Overload* (RO). Rural police reported more stress than urban police. A recent report of BPR&D reveals that Indian police have 25% vacant post while UP police has 60% vacant posts (HT, 22.04.2012). It is difficult to maintain law and order of the state with 40% of police force when the crime rate is increasing day by day. Crime statistics of 2010 indicate that Uttar Pradesh accounted for 33.9% of the total crime reported in the

year 2010. Again, Uttar Pradesh reported highest SLL (Special & Local Laws) crime rate of 46.7% in the country during 2010. Most of the Indian population lives in rural areas. Thus, the work load on rural police is higher than urban police. It may be the cause of more RO among rural police personnel.

Significant differences have also been observed on *Role Isolation* ( $t=5.130$ ,  $p=.000$ ), *Personal Inadequacy* ( $t=3.393$ ,  $p=.001$ ), *Self Role Distance* ( $t=4.013$ ,  $p=.000$ ) and *Resource Inadequacy* ( $t=3.443$ ,  $p=.001$ ). Rural police scored higher stress on all four role stressors. They reported environment of low trust, low supportiveness and low interest more than urban police. Kroes et al. (1974) reported that an officer is better able to cope with the stress he faces if he feels that his superiors know and understand his problems and are expected to support him in difficult times. But, *Role Isolation* is a prevalent feature of Indian police. The scores on the account are specially pronounced among rural police in this study. They also reported lesser training and knowledge than urban police resulting in more personal inadequacy. Rural police reported more value conflicts as well as more *Resource Inadequacy*. The researcher during personal visit to police stations took a note of poor infrastructure in rural police stations as compared to urban police stations. Of course, rural police stations were more spacious but facilities were not up to mark.

Relatively limited work has been carried out to measure stress among rural and urban police personnel. Spielberger et al. (1981) and Scott (2004) did not find any significant difference between stress of rural and small town police officers and resulted that work environment is one of the most predictive stressors for both *rural* and *urban* police.

Thus the null hypothesis  $H_01j$  stating that *there is no difference in quantum and type of stress between rural and urban police personnel is rejected for overall organizational role stress. It is also rejected for individual stressors also except Role Ambiguity (RA)*.

#### **5.1.11 Analysis across Districts**

As discussed earlier, the primary data has been collected from seven districts of Uttar Pradesh, namely *Agra, Aligarh, Auraiya, Kannauj, Farrukhabad, Hardoi* and *Jhansi*. As per districts of posting is concerned, *Kannauj* police ( $m=2.30$ ) is

reported most stressed followed by *Aligarh* (2.19) and *Jhansi* (2.15). *Hardoi* police (1.31) was reported least stressed followed by *Farrukhabad* (1.85) and *Agra* (2.05).

Significant differences have been observed on all ten stressors as well as on overall role stress ( $t=7.691$ ,  $p=.000$ , Table 5.1.11). Kannauj police reported maximum score on *Inter Role Distance* (2.90) and minimum on *Personal Inadequacy* (1.85) and *Role Ambiguity* (1.85). Hardoi police reported maximum on *Inter Role Distance* (2.20) and minimum on *Role Ambiguity* (0.80). Farrukhabad police reported maximum on *Inter Role Distance* (2.86) and minimum on *Role Ambiguity* (1.77) while Agra police reported maximum score on same *Inter Role Distance* (2.47) and minimum on *Personal Inadequacy* (1.69). Similarly, Aligarh police reported maximum score on *Inter Role Distance* (2.90) and minimum on *Personal Inadequacy* (1.55). Auraiya police also reported maximum score on *Inter Role Distance* (3.01) and minimum on *Personal Inadequacy* (1.43). In the same way, *Jhansi* police also reported maximum score on *Inter Role Distance* (2.65) and minimum score on *Personal Inadequacy* (1.77). Thus the hypothesis  $H_{01k}$  stating that *there is no difference in quantum and type of stress among respondents posted in different districts is rejected for overall organizational role stress as well as for individual stressors*. The results are contrary to the general assumption that police culture is almost same everywhere because of their same job profile.

Table 5.1.11: Scores across Districts

Stressors	Mean							SD							F-value	p-value
	Kan (N=174)	Har (N=20)	Farr (N=30)	Agra (N=193)	Alig (N=34)	Aurai (N=37)	Jhansi (N=12)	Kan (N=174)	Har (N=20)	Farr (N=30)	Agra (N=193)	Alig (N=34)	Aurai (N=37)	Jhansi (N=12)		
IRD	2.90	2.20	2.86	2.47	2.90	3.01	2.65	1.01	1.33	0.67	0.89	0.94	0.73	0.82	5.278	.000**
RS	2.46	1.26	2.15	2.21	2.58	2.31	2.25	1.11	0.99	0.86	0.90	1.02	0.90	0.70	5.287	.000**
REC	2.00	0.94	1.50	1.77	1.88	1.76	2.01	0.97	0.71	0.66	0.92	0.66	0.79	0.57	5.379	.000**
RE	2.28	1.69	1.72	2.20	2.46	1.94	2.21	0.80	1.08	0.51	0.79	0.60	0.65	0.54	4.940	.000**
RO	2.46	1.16	2.09	2.07	2.07	2.03	2.06	1.07	1.12	1.06	1.04	1.00	0.93	1.01	5.845	.000**
RI	2.45	1.25	1.88	2.10	2.36	2.00	2.31	1.19	0.72	0.67	0.87	1.06	0.77	0.71	6.253	.000**
PI	1.85	1.05	1.40	1.69	1.55	1.43	1.77	0.92	0.87	0.69	0.93	0.62	0.61	0.77	4.047	.001**
SRD	2.22	1.36	1.56	2.03	2.07	1.84	2.25	1.00	0.83	0.75	0.82	0.99	0.67	0.41	5.114	.000**
RA	1.85	0.80	1.19	1.77	1.61	1.77	1.79	1.10	0.88	0.66	0.97	0.94	0.67	0.70	5.121	.000**
Rin	2.50	1.43	2.18	2.24	2.42	2.52	2.25	1.01	0.91	0.76	0.94	0.99	0.76	1.01	4.540	.000**
ORS	2.30	1.31	1.85	2.05	2.19	2.06	2.15	0.79	0.69	0.48	0.63	0.68	0.59	0.39	7.691	.000**



Analysis also has been carried out to understand the personality profile of police personnel surveyed on five dimensions of *Activity* (Act), *Sociability* (Sy), *Aggression-Hostility* (Agg-Host), *Impulsive Sensation Seeking* (ImpSS) and *Neuroticism-Anxiety* (N-Anx) with the help of Zuckerman-Kuhlman questionnaire. The details of the analysis are presented in this section.

## 5.2 Overall Score on Personality Traits

Police personnel reported high medium scores on all personality dimensions except N-Anx (Table 5.2; Figure 5.4). Personnel reported highest score on *Activity* (2.60). It shows that overall police personnel are active. It is important for police officers to be active because their job context has greater impact on society. They have to work round the clock. Their activity orientation enable them to take own and independent judgment as and when required. Being activity oriented, they have problem solving attitude. Respondents reported relatively high score on *Sociability* as well (mean=2.18). Police personnel reported to be sociable, exhibitionistic and expressive. Respondents also reported high medium score on *Aggression-Hostility* which indicates hostile nature of police personnel. According to Chaplin (1982), hostile individuals have the desire to cause harm to others or have intense anger towards others. Aggression is the act of overt harmful and hurtful behaviors such as verbal and physical attacks and property destruction. Studies have indicated positive correlation among hostility, stress and cardiovascular diseases (Singleton, 1977). High score on the account has implications for Indian police personnel.

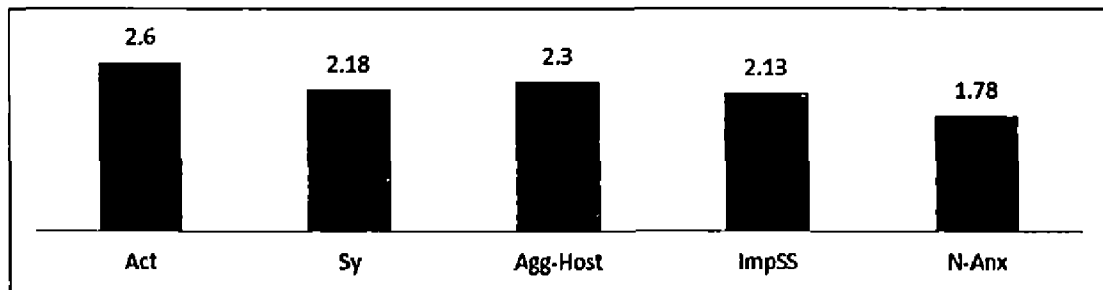
**Table 5.2: Scores on Personality Traits**

Personality Dimensions	Mean	SD	Rank	Low Score		Low Medium		High Medium		Very High	
				No.	%	No.	%	No.	%	No.	%
Act	2.60	0.549	1	8	1.6	72	14.4	282	56.4	138	27.6
Sy	2.18	0.599	3	18	3.6	207	41.4	242	48.4	33	6.6
Agg-Host	2.30	0.717	2	26	5.2	158	31.6	237	47.4	79	15.8
ImpSS	2.13	0.666	4	28	5.6	235	47.0	191	38.2	46	9.2
N-Anx	1.78	0.635	5	63	12.6	254	50.8	167	33.4	16	3.2

(Note: Mean Values: 0-1, Low; 1.1-2, Low Medium, 2.1-3, High Medium, 3.1-4, Very High)

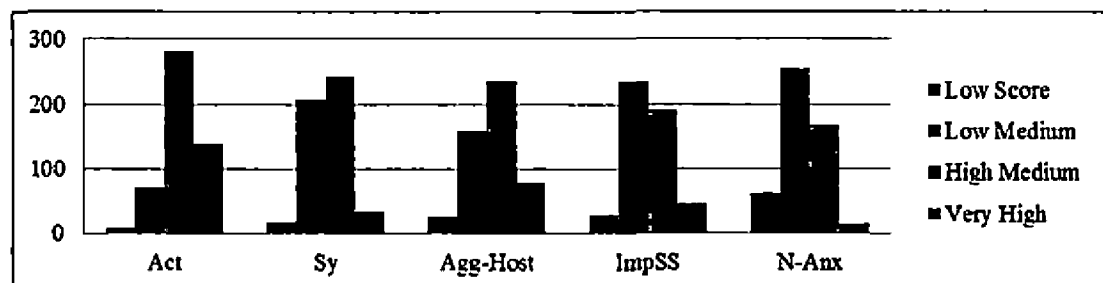
Police personnel reported higher than mean score on *Impulsive Sensation Seeking* as well (2.13). This indicates that police personnel have a predisposition to search for new adventures. However, police personnel reported low medium score on *Neuroticism-Anxiety*. It is a good omen because high score on neuroticism scale indicates a proneness to experience of negative emotions such as anxiety, depression, fear, anger, guilt and sadness (Saucier & Goldberg, 2002). Such individuals usually feel insecure and easily become jealous of others. People with high scores on this scale tend to entertain irrational ideas, experience a lack of impulse control and an ability to deal with stressful situations.

**Figure 5.4: Mean Scores on Personality Traits**



The dispersion of the data (Figure 5.5) helps us understand the spread of personality traits in police personnel. The overall personality scores shows that 56.4% (N=282) police personnel reported high medium score on *Activity*, 48.4% (N= 242) reported high medium score on *Sociability*, and 47.4% (N=237) reported high medium score on *Aggression-Hostility*. As regards *Sensation Seeking*, 47% (N=191) reported low medium score and on *Neuroticism-Anxiety*, 50.8% (N= 254) reported low medium scores. Thus police personnel exhibited varied personality orientations on different personality traits.

**Figure 5.5: Spread of Personality Traits**



Thus the null hypothesis  $H_0$ 2 stating that *there is no difference in nature and intensity of personality traits among police personnel* is rejected. The analysis revealed that there are differences in personality traits among police personnel.

An attempt was made to understand differences on personality traits as per demographic variable like gender, age, experience, rank and type of organizations. The results on the accounts are presented below:

### **5.2.1 Analysis across Gender**

Analysis as per gender revealed that male police personnel scored high on *Activity, Aggression-Hostility* and *Impulsive Sensation Seeking*. On the other hand, female police personnel scored high on *Sociability* and *Neuroticism-Anxiety*. However, significant difference has been reported on two personality traits, namely, *Impulsive Sensation Seeking* ( $t=1.984$ ,  $p=0.048$ ) and *Neuroticism-Anxiety* ( $t=2.350$ ,  $p=0.019$ ). The male police personnel emerged as more Sensation Seekers than females. It shows that males are more fearless than females. The reason may be that policing is primarily considered a male occupation. Administrative personnel don't believe women should be police officers. There are such standards in the police department that they are not easily promoted to higher levels. In spite of working effectively, they are more blamed than males on mistakes (Potts, 1983). The reason may also lie in the upbringing of girls in the country like India. Since childhood, they are groomed to shoulder family responsibilities more than adventures, thrill seeking and doing things just for excitement.

Females scored significantly high on *Neuroticism-Anxiety* than their male counterparts ( $p<0.05$ ). It may be conjectured that females struggle to balance the demands of their work with those of their home and family. Again, policing is considered a male occupation. Females are often targeted of criticism for their mistakes. Thus, females in police services may encounter frequent emotional upsets, worries, fearfulness, and criticism than male police personnel. The results are in consistent with the studies of Maclaren et al. (2010) and Struber et al. (2008) which reported men more sensation seeker and women higher on *Neuroticism-Anxiety*. The results also in congruence to literature (Feingold, 1994; Costa et al., 2001; Schmitt et al., 2008) that posited women higher on Neuroticism in comparison to men.

**Table 5.2.1: Scores across Gender**

Personality Traits	Mean		SD		t-value	p-value
	Male (N=439)	Female (N=61)	Male	Female		
Act	2.60	2.58	0.577	0.286	0.277	0.782
Sy	2.13	2.15	0.622	0.401	0.367	0.714
Agg-Host	2.31	2.26	0.742	0.513	0.464	0.643
ImpSS	2.15	1.97	0.677	0.566	1.984	0.048*
N-Anx	1.75	1.96	0.650	0.483	-2.350	0.019*

Thus the null hypothesis  $H_{02a}$  stating that *there is no difference in personality traits across gender is rejected for Impulsive Sensation Seeking and Neuroticism-Anxiety.*

### 5.2.2 Analysis across Age

For analysis on the basis of age of respondents, four groups were formed as discussed in section 5.1.7. On the basis of age, significant differences have been observed on *Activity, Sociability and Aggression-Hostility* (Table 5.2.2).

Police personnel of B and C age group scored significantly high on *Activity* than A and D age groups ( $t=8.852$ ,  $p=.000$ ). D age group scored maximum both on *Sociability* ( $t=3.825$ ,  $p=.010$ ) and *Aggression-Hostility* ( $t=4.339$ ,  $p=.005$ ) than other age groups. As per *Aggression-Hostility*, results are consistent with the study of O'Sullivan et al. (1996) which revealed a correlation of age with *Aggression-Hostility*. The results are contrary to the findings of Sakaguchi et al. (2006) and Ready & Robinson (2008) who reported no significant difference in personality traits as per age groups. The results are also not consistent with other researches such as Lauriola & Levin (2001) who reported that advancement of age decreases extraversion and openness to experience.

Thus the null hypothesis  $H_{02b}$  stating that *there is no difference in personality traits as per different age groups is rejected for Activity, Sociability and Aggression Hostility. However, it is not rejected for the rest two personality traits namely Impulsive Sensation Seeking and Neuroticism-Anxiety.*

**Table 5.2.2 Scores across Age**

Stressors	Mean				SD				F-value	p-value
	A (N=119)	B (N=97)	C (N=121)	D (N=163)	A	B	C	D		
Act	2.41	2.80	2.72	2.69	0.55	0.52	0.52	0.53	8.852	.000**
Sy	2.03	2.20	2.19	2.27	0.50	0.54	0.64	0.63	3.825	.010*
Agg-Host	2.18	2.16	2.36	2.43	0.73	0.71	0.71	0.68	4.339	.005**
ImpSS	2.21	2.06	2.07	2.15	0.63	0.66	0.56	0.74	1.414	.238
N-Anx	1.79	1.79	1.80	1.75	0.65	0.61	0.56	0.69	0.200	.897

(Note: A- Lower age group, B- lower middle age group, C-middle senior age group, D-senior age group)

### 5.2.3 Analysis across Length of Service

The length of service has been categorized in four groups as described in section 5.1.9. Out of five personality traits, significant differences have been found on four personality traits as per experience. D group reported higher scores on four personality traits namely *Activity* ( $t=6.863$ ,  $p=.000$ ), *Sociability* ( $t=3.491$ ,  $p=.008$ ), *Aggression-Hostility* ( $t=3.069$ ,  $p=.016$ ) and *Neuroticism-Anxiety* ( $t=5.196$ ,  $p=.000$ ) in comparison to other experience groups (Table 5.2.3).

**Table 5.2.3 Scores across Length of Service**

Stressors	Mean				SD				F-value	p-value
	A (N=129)	B (N=99)	C (N=131)	D (N=141)	A	B	C	D		
Act	2.44	2.51	2.67	2.75	0.53	0.55	0.58	0.47	6.863	.000**
Sy	2.04	2.19	2.18	2.31	0.52	0.52	0.67	0.61	3.491	.008**
Agg-Host	2.17	2.27	2.31	2.43	0.74	0.64	0.75	0.68	3.069	.016*
ImpSS	2.17	2.14	2.10	2.12	0.65	0.62	0.64	0.72	0.949	.435
N-Anx	1.75	1.89	1.72	1.75	0.65	0.58	0.57	0.66	5.196	.000**

(Note: A- 1-10 years, B- 11-20 years, C- 21-30 years, D- more than 31 years)

Thus the null hypothesis  $H_{02c}$  stating that *there is no difference in personality traits across varying length of service is rejected for all personality traits except Impulsive Sensation Seeking*.

### 5.2.4 Analysis across Rank

Three groups were formed as per rank as discussed in section 5.1.3. Out of five personality traits, significant differences have been observed on three personality traits as per rank. Lower rank police personnel reported higher score on *Sociability* ( $t=4.369$ ,  $p=.013$ ), *Impulsive Sensation Seeking* ( $t=6.852$ ,  $p=.001$ ) and *Neuroticism-Anxiety* ( $t=10.608$ ,  $p=.000$ ) compared to middle rank or senior rank personnel (Table 5.2.4).

**Table 5.2.4 Scores across Rank**

Stressors	Mean			SD			F-value	p-value
	Lower (N=408)	Middle (N=48)	Senior (N=8)	Lower	Middle	Senior		
Act	2.59	2.67	2.48	0.57	0.44	0.42	0.824	.439
Sy	2.20	2.16	1.57	0.61	0.52	0.37	4.369	.013*
Agg-Host	2.32	2.26	1.75	0.68	0.54	0.69	2.702	.068
ImpSS	2.18	1.94	1.64	0.68	0.54	0.69	6.852	.001**
N-Anx	1.84	1.53	1.30	0.64	0.53	0.41	10.608	.000**

Thus the null hypothesis  $H_{02d}$  stating that *there is no difference in personality traits across rank is rejected for all personality traits except Activity and Aggression-Hostility*.

### 5.2.5 Analysis across Type of Organization

The analysis on the basis of type of organization shows no significant difference in Armed and Civil police on *Activity* ( $t=0.242$ ,  $p=.623$ ), *Sociability* ( $t=1.512$ ,  $p=.219$ ) and *Impulsive Sensation Seeking* ( $t=3.660$ ,  $p=.056$ ). But significant differences have been observed between these groups on *Aggression-Hostility* ( $t=6.385$ ,  $p=.012$ ), and *Neuroticism-Anxiety* ( $t=7.969$ ,  $p=.005$ ) (Table 5.2.5).

Civil police personnel reported to be more aggressive and hostile than Armed police personnel ( $t=6.385$ ,  $p=.012$ ). It may be due their nature of job. They encounter constant exposure to *crimes, media and general public* more than armed police. Armed police reported higher on *Sensation Seeking* ( $t=3.660$ ,  $p=.056$ ) and *Neuroticism-Anxiety* ( $t=7.969$ ,  $p=.005$ ) than Civil police personnel.

**Table 5.2.5 Scores across Type of Organizations**

Stressors	Mean		SD		t-value	p-value
	CP	AP	CP	AP		
Act	2.59	2.62	0.51	0.61	0.242	.623
Sy	2.16	2.23	0.58	0.62	1.512	.219
Agg-Host	2.36	2.18	0.71	0.71	6.385	.012*
ImpSS	2.09	2.21	0.65	0.68	3.660	.056
N-Anx	1.72	1.90	0.60	0.68	7.969	.005**

Thus the null hypothesis  $H_{02e}$  stating that *there is no difference in personality traits between civil police and armed police is rejected for Aggression-Hostility*

and Neuroticism-Anxiety. However, it is not rejected for Activity, Sociability and Impulsive Sensation Seeking.

### 5.2.6 Analysis across Educational attainments

While analyzing the data of personality traits on the basis of qualification, relatively weak significant difference has been noted on only one trait of *Impulsive Sensation Seeking* ( $t=2.372$ ,  $p=.094$ ). Less qualified police personnel were reported highest on sensation seeking than highly educated personnel (Table 5.2.6). The present results are contrary to the previous study of Anic (2007) who found that higher education is significantly and positively correlated to sensation seeking and risk taking.

Thus the null hypothesis  $H_{02f}$  stating that *there is no difference in personality traits across their educational attainments* is not rejected.

**Table 5.2.6 Scores across Educational attainments**

Stressors	Mean			SD			F-value	p-value
	A (N=217)	B (N=214)	C (N=69)	A	B	C		
Act	2.59	2.60	2.66	0.54	0.57	0.47	0.528	.590
Sy	2.24	2.16	2.07	0.62	0.59	0.51	2.318	.100
Agg-Host	2.32	2.32	2.17	0.69	0.75	0.66	1.239	.291
ImpSS	2.17	2.14	1.97	0.69	0.62	0.67	2.372	.094
N-Anx	1.80	1.79	1.66	0.65	0.62	0.59	1.289	.276

In order to probe the issue further and find out the correlation of personality traits and role stress among police personnel, *bivariate* correlation analysis was performed. The details are presented below:

### 5.3 Correlation between Personality Traits and Organizational Role Stress

This study consists of two set of variables- the *dependent* and the other set of *independent*. The dependent variable included dimensions of Organizational Role Stress (ORS) and independent variable comprises various personality traits. *Pearson's correlation analysis* was undertaken to understand the relationship between these two set of variables. Table 5.3 presents the results of such analysis. These correlation results indicate that *Inter Role Distance (IRD)* is significantly and positively related to four out of five facets of personality traits ( $p<0.05$ ) with

correlations ranging from 0.09 to 0.16. However, *Impulsive Sensation Seeking* is not significantly correlated with IRD. The analysis indicates that active police personnel experience greater IRD. The correlation between Inter Role Distance and *Sociability* is also significant but the correlation is relatively weak. Further, the police personnel who are more aggressive and have a feeling of hostility towards others also experience higher level of IRD. Similarly, police personnel, higher on anxiety and neuroticism are also experiencing higher level of IRD.

*Role Stagnation* (RS), second constituent of ORS, is also significantly and positively related with three facets of personality namely; *Sociability*, *Aggression-Hostility* and *Neuroticism-Anxiety* ( $p < 0.01$ ) with correlations ranging from 0.21 to 0.239 (0.24). But, it is not significantly related with *Activity* and *Impulsive Sensation Seeking*. The correlation matrix indicates that more social and more aggressive police personnel experience higher RS. The study also indicates that respondents, who are emotionally upset, worried, fearful and less confident, experience high more RS.

The third constituent, *Role Expectation Conflict* (REC) is significantly and positively related with four facets of personality traits namely, *Sociability*, *Aggression-Hostility*, *Impulsive Sensation Seeking* and *Neuroticism-Anxiety* ( $p < 0.01$ ) with correlations ranging from 0.13 to 0.31. But, it is not significantly correlated with *Activity*. *Sociability* and REC are found to be highly correlated. It indicates that police personnel who spend more time with their friends and who do not engage in solitary activities experience higher REC. Similarly, rude, aggressive, short tempered, less self confident and emotionally upset personnel experience higher level of REC. Another significant but relatively weak correlation is observed between *Impulsive Sensation Seeking* and REC. It indicates high risk taking police personnel experience more REC.

Further, the fourth constituent of ORS, *Role Erosion* (RE) is significantly and positively related with *Activity*, *Sociability*, *Aggression-Hostility*, *Impulsive Sensation Seeking* ( $p < 0.01$ ) and *Neuroticism-Anxiety* ( $p < 0.05$ ), with correlations ranging from 0.09 to 0.20. The highest correlation was reported for *ImpSS* (0.20) followed by *Sociability* (0.19). It indicates police personnel scoring high on *Sociability* and *Sensation Seeking* experience more RE.



Fifth constituent of ORS, *Role Overload* (RO) is significantly and positively related with *Sociability*, *Aggression-Hostility*, and *Neuroticism-Anxiety* ( $p < 0.01$ ), with correlations ranging from 0.16 to 0.21. The highest correlation is reported with *Sociability* (0.21) followed by *Neuroticism-Anxiety* (0.20). It indicates that police personnel scoring high on *Sociability* are experiencing high RO. It might be possible that they don't find time to spend with their families due to excessive workload. The study also indicates that tensed, worried, and emotionally upset police personnel experience higher level of RO. It is also found that *Activity* as well as *Sensation Seeking* has no relationship with RO.

*Role Isolation* (RI), sixth constituent of ORS is significantly and positively related with *Sociability*, *Aggression-Hostility*, and *Neuroticism-Anxiety* ( $p < 0.01$ ), with correlations ranging from 0.16 to 0.239 (0.24). The highest correlation is reported with *Neuroticism-Anxiety* (0.24) followed by *Aggression-Hostility* (0.17). It indicates that emotionally upset, worried, and less confident police personnel are experiencing higher level of RI.

Seventh constituent of ORS, *Personal Inadequacy* (PI) is significantly and positively related with *Sociability*, *Aggression-Hostility*, *Impulsive Sensation Seeking* and *Neuroticism-Anxiety* ( $p < 0.01$ ), with correlations ranging from 0.15 to 0.22. The highest correlation is found with *Sociability* (0.22) followed by *Neuroticism-Anxiety* (0.20). It indicates social, excitement seeking, rude and worried police personnel are experiencing high PI.

Further, *Self Role Distance* (SRD) which is eighth constituent of ORS, is significantly and positively related with *Sociability*, *Aggression-Hostility*, *Impulsive Sensation Seeking* and *Neuroticism-Anxiety* ( $p < 0.01$ ), with correlations ranging from 0.17 to 0.29. The highest correlation is found with *Neuroticism-Anxiety* (0.29) followed by *Sociability* (0.21). It indicates that emotionally upset, worried, fearful, less confident and sensitive police personnel experience higher level of conflicts between their self concept and organizational role. Similarly, social and outgoing personnel also experience higher level of SRD.

Table 5.3: Correlation Matrix

	Act	Sy	AggHost	ImpSS	NAnx	IRD	RS	REC	RE	RO	RI	PI	SRD	RA
Act	1													
Sy	.343**	1												
AggHost	.313**	.379**	1											
ImpSS	.229**	.311**	.298**	1										
NAnx	.127**	.246**	.241**	.289**	1									
IRD	.156**	.093*	.167**	-.041	.134**	1								
RS	.010	.218**	.214**	.085	.239**	.570**	1							
REC	-.037	.315**	.231**	.134**	.263**	.414**	.598**	1						
RE	.156**	.199**	.164**	.202**	.095*	.322**	.452**	.379**	1					
RO	.025	.214**	.169**	.055	.208**	.530**	.624**	.597**	.325**	1				
RI	.015	.166**	.173**	.069	.239**	.565**	.673**	.550**	.380**	.595**	1			
PI	-.043	.224**	.168**	.159**	.207**	.330**	.446**	.499**	.354**	.505**	.436**	1		
SRD	.017	.219**	.174**	.185**	.293**	.491**	.626**	.539**	.463**	.567**	.636**	.692**	1	
RA	-.076	.238**	.203**	.200**	.185**	.268**	.475**	.501**	.327**	.487**	.421**	.559**	.639**	1
RIn	.137**	.205**	.245**	.098*	.160**	.589**	.588**	.467**	.457**	.579**	.614**	.460**	.596**	.451**

\*\* Correlation is significant at the 0.01 level (2-tailed)

\* Correlation is significant at the 0.05 level (2-tailed)

Ninth constituent, *Role Ambiguity* (RA) is significantly and positively related with *Sociability*, *Aggression-Hostility*, *Impulsive Sensation Seeking* and *Neuroticism-Anxiety* ( $p < 0.01$ ), with correlations ranging from 0.18 to 0.238 (0.24). The highest correlation is found with *Sociability* (0.23). It indicates that police personnel scoring high on *Sociability* experience high RA.

Finally, the tenth constituent of ORS, *Resource Inadequacy* (RI) is significant and positively related to all five personality traits ( $p < 0.01$ ,  $p < 0.05$ ), with correlations ranging from 0.09 to 0.24. The highest correlation is found with *Aggression-Hostility* (0.24). It indicates that the all police personnel irrespective of their personality orientation experience *Resource Inadequacy* in police organization.

Overall, the correlation matrix indicates that *Activity* orientation, a constituent for personality traits has weakest correlations with various stressors. It is significantly correlated only with *Inter Role Distance* (0.15), *Role Erosion* (0.15) and *Resource Inadequacy* (0.13). *Sociability* is significantly correlated with all ten constituents of ORS. This facet has highest correlation with REC (0.31). *Aggression-Hostility* is significantly correlated with all stressors, exhibiting highest correlation with RI (0.24). *Impulsive Sensation Seeking* is significantly correlated with six role stressors, namely, REC (0.13), RE (0.20), PI (0.15), SRD (0.18), RA (0.20) and RI (0.09). However, *Neuroticism-Anxiety* is significantly correlated to all role stressors with highest correlation with *Self Role Distance* (0.29).

Thus the null hypothesis  $H_03$  stating that *there is no correlation between stress (measured through ORS and its ten constituent stressors) and different personality traits among police personnel is rejected. However, it is not rejected for only one facet of personality, i.e. Activity orientation.*

#### **5.4 Structural Model**

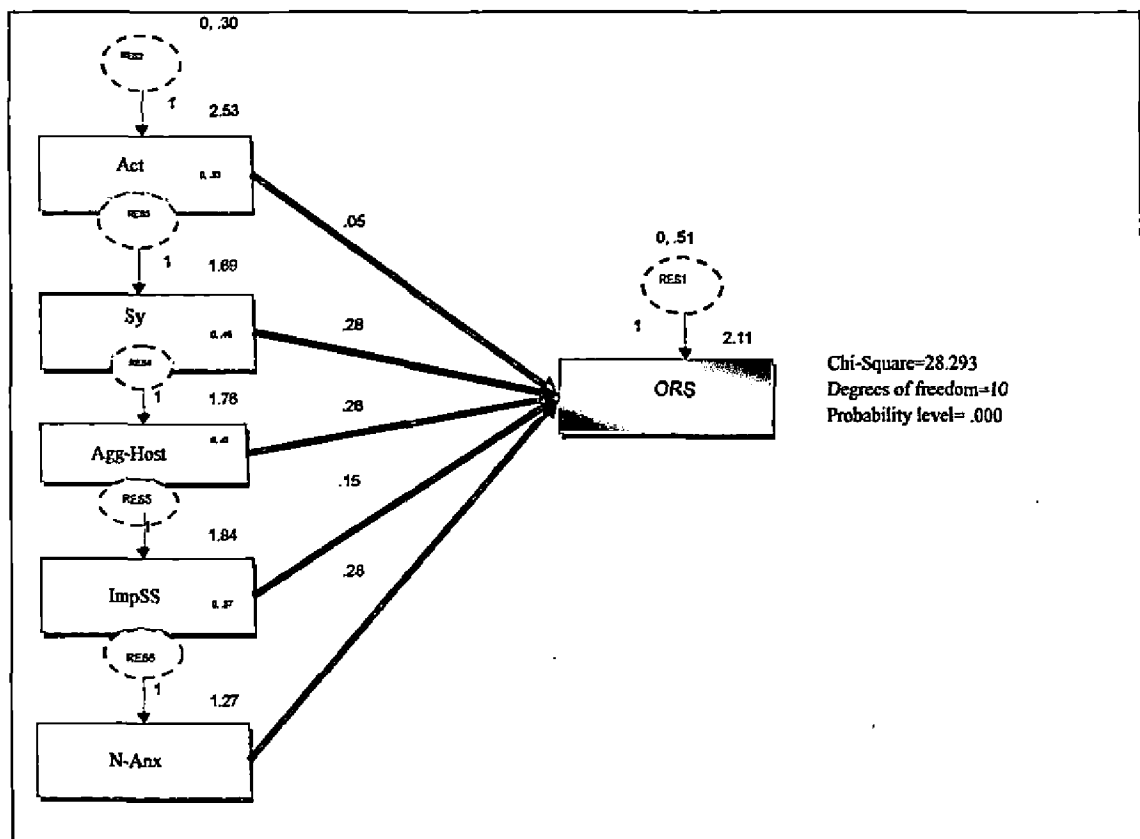
A hypothesized model was developed to understand the relationship of personality traits and organizational role stress on the basis of existing literature review (as discussed in chapter 4). This model is analyzed with the help of *Structural Equation Modeling* (SEM). SEM is used to analyze the hypothesized relationships. Structural relationships are depicted with the help of a path diagram. The first step in analyzing the structural model is to evaluate the model based on

the fit indices. Overall, the fit indices indicate results for goodness of fit as well as badness of fit. Table 5.4 depicts the results for fit indices for structural model of this study. As observed from table, CMIN/DF is 2.839 which is below the recommended value of 3.0 as proposed by Kline (1998) for a model to be fit. Other fit indices also indicated a good model fit, as most of values are above the acceptable limit of 0.90 (GFI=0.933, AGFI=0.902, CFI=0.871, NNFI=0.913). Again for badness of fit, the value of RMSEA of the structural model is .079. This is below the recommended value of 0.08 (Heene et al., 2011). The results of fit indices show that the data has a good fit with the model. The structural model with all the coefficients is shown in the Figure 5.6.

**Table 5.4: Results for Fit Indices for Structural Model**

Fit Indices	Recommended level	Measurement Model
CMIN/df	<3.00 (Arbuckle, 2007; Byrne, 2001)	2.829
GFI	>.90 (Byrne, 2001; Hair et al., 1998)	0.933
AGFI	>.90 (Byrne, 2001; Hair et al., 1998)	0.902
NNFI	>.90 (Hu & Bentler, 1999)	0.913
CFI	>.90 (Bentler, 1992)	0.817
RMSEA	<.08 (Heene et al., 2011)	0.079

**Figure 5.6: Structural Model**



#### 5.4.1 Regressions for the Structural Model

The structural model had 27 distinct sample moments, 17 distinct parameters to be estimated and 10 degrees of freedom. The results are based on data drawn from 500 cases. It indicates that *Activity*, *Sociability*, *Aggression-Hostility*, *Impulsive Sensation Seeking* and *Neuroticism-Anxiety* contribute to *Organizational Role Stress* as shown in Figure 5.4a. *Sociability* explains 28% of the variance in ORS. This reveals that *Sociability* is explaining maximum variance among all five personality dimensions. *Neuroticism-Anxiety* and *Aggression-Hostility* explains 27% and 26% variance in ORS respectively. *Impulsive sensation Seeking* explains only 15% of the variance in ORS. *Activity* is explaining least i.e. 5% variance in ORS. Table 5.4.1 presents results of regression analysis for structural model. The regression weight for *Activity* is not significant as the value of critical ratio for parameter is 1.021 which is less than the recommended value of 1.96 (Hair et al., 2010). But, all other regression weights are significant (i.e. C.R.> 1.96). It indicates that except *Activity*, all personality dimensions have a significant impact on ORS.

Table 5.4.1: Regression table for Structural Model

Regression	Estimate	S.E.	C.R.	Correlations
Act --->ORS	.035	.034	1.021	.046
Sy ---> ORS	.234	.036	6.466*	.279
ImpSS --- > ORS	.139	.041	3.370*	.149
NAnx --- > ORS	.243	.038	6.337*	.273
AggHost -->ORS	.258	.044	5.918*	.256

The result of standardized regression weights indicates that *Activity* (.046) is the least predictor of ORS. *Sociability* (.279), *Neuroticism-Anxiety* (.273), *Aggression-Hostility* (.256) and *Impulsive Sensation Seeking* (.149) significantly predict Organizational Role Stress in police personnel.

#### 5.4.2 Results of Hypothesis Testing through SEM

The model of personality used in the study has five dimensions namely; *Activity*, *Sociability*, *Aggression-Hostility*, *Impulsive Sensation Seeking* and *Neuroticism-*

*Anxiety*. It was hypothesized that these personality traits have no impact on organizational role stress among police personnel.

- The null hypothesis Ho4a proposed that *Activity* (Act) of the police personnel has no significant impact on ORS of police personnel. This null hypothesis Ho4a is not rejected. The relationship between *Activity* and *Organizational Role Stress* was not found significant (C.R. =1.021).
- Ho4b proposed that *Sociability* (Sy) has no significant impact on ORS of police personnel. This null hypothesis Ho4b is rejected because the relationship between *Sociability* and *Organizational Role Stress* was found significant (C.R. =6.466). Therefore, alternative hypothesis is not rejected i.e. there is a significant impact of *Sociability* on role stress among police personnel.
- Ho4c proposed that *Impulsive Sensation Seeking* (ImpSS) has no significant impact on ORS of police personnel. The hypothesis Ho4c is rejected because the relationship between *Impulsive Sensation Seeking* and *Organizational Role Stress* was found significant (C.R. =3.370). Thus, there is a significant impact of *Impulsive Sensation Seeking* on role stress among police personnel.
- Ho4d proposed that *Aggression-Hostility* (Agg-Host) has no significant impact on ORS of police personnel. The hypothesis Ho4d is rejected as the relationship between *Aggression-Hostility* and *Organizational Role Stress* was found significant (C.R. =5.918). Thus, there is a significant impact of *Aggression-Hostility* on ORS among police personnel.
- Ho4e proposed that *Neuroticism-Anxiety* (N-Anx) has no significant impact on ORS of police personnel. This hypothesis is rejected because it was found that there is a significant relationship between *Neuroticism-Anxiety* and *Organizational Role Stress* (C.R. =6.337). Thus, there is a significant impact of *Neuroticism-Anxiety* on ORS among police personnel

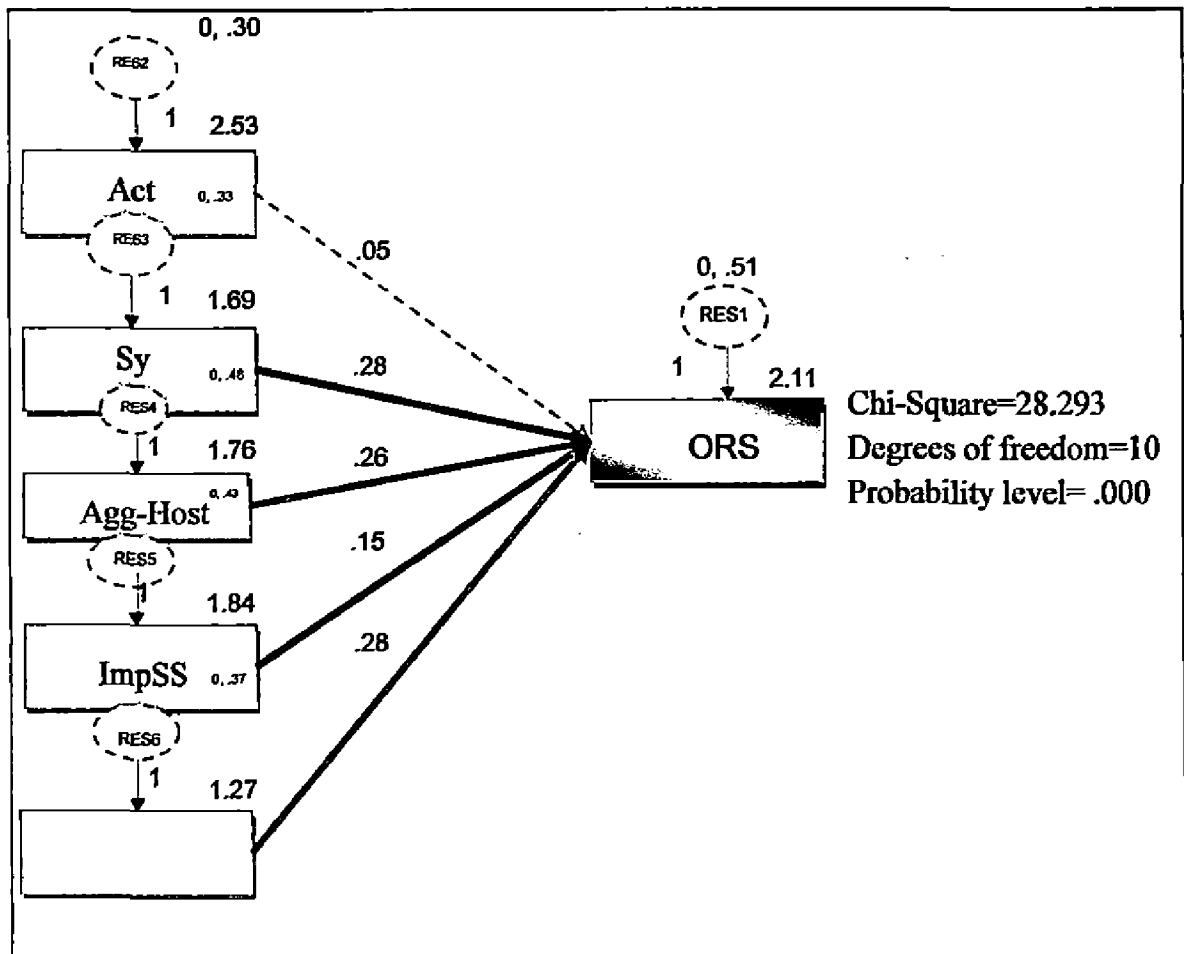
Table 5.4.2 summarizes the results of the hypothesis testing. Figure 5.7 presents hypothesize tested model which depicts refined relationship of personality dimensions and organizational role stress.

**Table 5.4.2: Results of Hypothesis Testing through SEM**

Hypotheses	Description	C.R.	Remarks
Ho4a	Act ---> ORS	1.021	Not Rejected
Ho4b	Sy ---> ORS	6.466*	Rejected
Ho4c	ImpSS --->ORS	3.770*	Rejected
Ho4d	Agg-Host--->ORS	5.918*	Rejected
Ho4e	N-Anx ---> ORS	6.337*	Rejected

The results of the present study are in line with the existing literature on *Neuroticism* and *Anxiety* (Vollrath, 2001; Aizzat et al., 2005; Kerby, 2003; Lolas et al., 1991; Lau et al., 2006 and Romero et al., 2009) which shows that *Neuroticism* is positively related to greater perceived stress and suicidal thinking. As regards *Extraversion*, *Activity* and *Sociability*, the results of the present research are contrary to the most of the existing literature on the subject (Kerby, 2003; Lau et al., 2006, Chioqueta & Stiles, 2005; Goktan, 2007, Mutlu et al., 2010). These studies reported that higher values on *Extraversion*, *Activity* and *Sociability* results in lower stress. However, some studies partially supports the present results on *Extraversion* wherein it has been reported that persons high in *Extraversion* experience both more stressful and more pleasurable events (Vollrath, 2001). As regards *Sensation Seeking*, the results are partially supported and partially not supported by existing literature. It has been reported that high sensation seekers experience higher stressful events (Roberti, 2004) but many research studies reported that *Sensation Seeking* is negatively correlated with stress. As regards *Hostility*, results are in line with most of previous research studies (Rosenman, 1986; Hardy & Smith, 1988; Weidner et al., 1989; Voegele, 1998) which reported that high scores on *Hostility* increase perceived stress. Existing literature indicates that hostile persons experience increased heart rate and high blood pressure when they are experimentally exposed to stressors, especially in context of interpersonal stress situations.

**Figure 5.7 Refined Structural Model**



### 5.5 Summary of Hypothesis Testing

The above discussion explained the results of the data analysis. Table 5.5 presents a summary of the results of hypothesis testing:

**Table 5.5: Summary of Hypothesis Testing**

S. No.	Hypothesis	Sub-hypothesis	Variables	Remarks
1.	Ho1	Ho1	Overall ORS	Rejected
		Ho1a	Vis-à-vis other occupational groups	Rejected
		Ho1b	Type of Organization	Rejected
		Ho1c	Rank	Rejected
		Ho1d	Marital Status	Not Rejected
		Ho1e	Gender	Partially Rejected
		Ho1f	Religion	Not Rejected
		Ho1g	Age	Not Rejected
		Ho1h	Qualification	Partially



				Rejected
		H01i	Experience	Partially Rejected
		H01j	Place of posting	Rejected
		H01k	District	Rejected
2.	Ho2	Ho2	Personality Traits	Rejected
		Ho2a	Gender	Partially Rejected
		Ho2b	Age	Partially Rejected
		Ho2c	Experience	Partially Rejected
		Ho2d	Rank	Partially Rejected
		Ho2e	Type of Organization	Partially Rejected
		Ho2f	Qualification	Not Rejected
3.	Ho3		Correlation	Rejected
4.	Ho4	Ho4	Overall Impact	Rejected
		Ho4a	<i>Act</i> on ORS	Not Rejected
		Ho4b	<i>Sy</i> on ORS	Rejected
		Ho4c	<i>ImpSS</i> on ORS	Rejected
		Ho4d	<i>Agg-Host</i> on ORS	Rejected
		Ho4e	<i>N-Anx</i> on ORS	Rejected

### 5.6 Results based on Content Analysis

Three questionnaires were administered in the present study. The first two questionnaires, ZKPQ and ORS had close-ended questions wherein responses were to be indicated as per numbering scheme provided in that questionnaire. These questionnaires yielded quantitative data and provided useful information regarding the intensity and level of stress. It has helped assess personality traits of police personnel. To supplement quantitative data with respect to stress, an open-ended questionnaire was also administered to the respondents. The analysis of open-ended questionnaire yielded useful insights. It helped understand specific stressors among police personnel. The analysis of this questionnaire was done by listing various responses and ascertaining how many times a specific stressor has been sighted as causing stress. It was often found that respondents used different words to express similar feeling. In that case a personal judgment was employed to club similar responses together and put them into broad categories.

The open-ended questionnaire had five questions. The first two questions were designed to understand specific stressors in police work. These questions aimed to assess what employees find bothersome in their jobs. At times, respondents may not indicate a factor bothersome in their own context. However, they may have no inhibition in indicating a factor bothersome in the context of their colleagues. The responses of the respondents indicated that they have treated both questions as essentially same. The factors that emerged stressful have been summarized in Table 5.6a. This analysis indicated specific stressors that cause stress among police personnel. Total number of respondents in the analysis is less than the actual sample size of the research because many respondents did not fill open-ended questionnaire. On the other hand, many respondents have mentioned more than one factor contributing to stress. On clubbing the responses, around 22 factors emerged stressful. For ease of understanding, top ten stressors were identified. The top ten factors that emerged as contributing to stress are presented in Table 5.6a.

**Table 5.6a: Ten Key Stressors among Police Personnel**

<b>Factors</b>	<b>Number of Responses (N=584)</b>	<b>Percentage</b>	<b>Rank</b>
Non grant of leave on time	112	19.17	1
Non-fulfillment of family responsibilities	94	16.09	2
Exploitation by senior officers	90	15.41	3
Political Pressure	56	9.54	4
Workload	52	8.90	5
Unlimited duty hours	49	8.39	6
Living away from family	42	7.19	7
Inadequate salary	32	5.47	8
Transfer/lack of promotions	30	5.13	9
Lack of cooperation from public	27	4.62	10

- **Non Grant of Leave on Time:** The problem related with sanction of leave is the most significant factor contributing to stress among police personnel. Approximately 19% of the respondents complained about not getting leave when needed. Chhabra & Chhabra (2009) reported that the problem is felt mostly by the lower ranked police personnel and least by officers. The study also shows that it is not denial of leave per se, but not getting it when required which creates stress. Certain other aspects that make non grant of leave as most potent stressor are *delay in processing leading to uncertainty, arbitrary exercise of discretion* in deciding leave matters, partiality in granting leave and lack of transparency.
- **Non-fulfillment of family responsibilities:** This stressor is similar to *Inter Role Distance*. There are issues related to *education and upbringing of children, family welfare, illness of family members, occasions/celebrations in family*. Police personnel reported that they are not able to provide good education to their children. Indian society puts emphasis on societal duties, participation in different social and religious occasions and festivals. Inability to participate in problems of family due to nature of job puts police personnel under stress. Respondents reported that they don't find time when their family needs them most. Females especially reported that they are not able to fulfill the demands and responsibilities of their families due to work demands.
- **Exploitation by Senior Officers:** This stressor emerged as third most potent stressor among police personnel. Respondents reported that senior officers create a suffocating environment in the name of discipline. As expected, senior officers felt that it is essential to have such strict discipline in the department. Most of the lower rank police officers reported that they don't feel that they can approach their seniors as and when required. It hints that the channels of communication between the lower level and senior levels are not truly established. Many respondents reported that there is no point in going to the senior officers as they are the source of the problem and they will not help anyway. Many of them reported that while communicating, senior officers use *improper, inappropriate* or at times even *abusive language*.

- **Political Pressure:** Political pressure emerged as fourth most potent stressor. Respondents reported that many times because of severe political pressure, they have to work against their will and also against good. If they refuse to work under this pressure, they are often victimized, for example transfer which is more a punishment practice. They have also pointed out that they indulge corrupt practices to satisfy political bosses. Some middle level officers opined that if the system needs an *effective, efficient* and *just* police, politics and policing must be separated as has been done in case of judiciary.
- **Workload:** This is same as *Role Overload* as discussed earlier. UP police have 60% vacant seats while it is the most populous state of India. Respondents reported that due to limited police force, workload on existing police is burdensome. They have to work for almost round the clock. In addition, there is tedious paper work. They present criminals in court hearings with all necessary documents. Additionally, UP is the place of traditions and festivals. Apart of the regular duties, police shoulders additional responsibilities during *festivals, games, VIP securities, elections* etc. Thus, police perform multifarious roles and they are not able to cope with this workload. Heavy workload has the potential of lowering the workers self-esteem because of their own perceived inefficiency (Edworthy, 2000). Pressure to meet deadlines has been reported as an important source of stress.
- **Unlimited duty hours:** Policing is a job with no set time limits or specified duty hours. Policing is a round the clock job. This makes personnel unhappy and unhealthy. Respondents reported that because of the nature of the job, they do not get adequate sleep and rest. Many respondents reported that in their entire working life, they have not slept for more than five hours on any day. This makes their attention span shorter. It makes them irritable and lowers their performance. In addition, because of no time schedule, they also don't have proper dietary regime. Many times, they are not able to take meals regularly and at the appointed time. The clarity of vision, calmness and equanimity needed in times of crisis cannot be ensured under such conditions. A police personnel, who is himself overworked and tense is not likely to be very sympathetic to the problems of colleagues and members of society.

- **Living away from family:** It was found that most of the police personnel are staying away from their families because of not getting family accommodation. At times, when they get accommodation, the locations are remote. Staying with family in such remote locations means sacrificing good education for children. It may also result in sacrificing the living standard. Therefore many of them are forced to stay alone. The separations are felt acutely by the lower level personnel. It is a constant source of worry and tension. The human needs for companionship are denied to them. There are also strict rules about interaction with outsiders and often there is no one to interact with, outside the force. Many respondents reported that most of the times, they think about their families while on duty. This distances them from their work and creates stress among them.
- **Inadequate Salary/facilities:** Another stressor which rankles police personnel is that while they work harder than most of other occupational groups, the facilities provided are not comparable. A dialogue of the film Singham presents the fact effectively “... *Jo din rat samaj ki sewa karta hai, uska pagaar corporate company me kam karne wale jhadu wale se bhi kam hai.... logon ka jitna kitchen hota hai, utna hame rahne ko quarter milta hai*” i.e. “the person who serves the society round the clock, his income is lesser to the sweeper of any corporate organization.... We are provided such a small quarter that is no more than a kitchen in size”. Young police personnel appear to be dissatisfied with pay as well. The respondents reported that they don’t get any benefit other than salary.
- **Transfers/Lack of promotions:** Yet another stressor reported by police personnel is frequent transfers/ lack of promotions. They reported that they always remain in a state of uncertainty about transfers. Often when they adjust in an environment, they get their transfer orders. They also complained about scarcity of promotional opportunities in the police department. Many of them felt that they may not get a single promotion in their entire job tenure. They also reported being stuck in the same role. The job content does not have much variety and is not inherently satisfying and challenging. They reported that the work is extremely hard, monotonous and carries little social

recognition and award. There is substandard infrastructure. Also, they get encouragement for pursuing any goals except the immediate task.

- **Lack of cooperation from public:** The police personnel experience stress due to behavior of the general public as well. They are well aware that public doesn't trust them. This feeling make them stressed. Respondents reported that they can handle most crimes with the help of public but public doesn't cooperate with them.

The other stressors reported by police personnel are *poor infrastructure, manhandling, lack of basic amenities, pressure to perform, shift work, atmosphere of mistrust, marital disharmony, social isolation, bad image and leadership issues*. The stressors identified among Indian police support the existing literature (Mathur, 1994; Suresh, 1992; Tripathy, 1993; Singhvi & Mathur, 1997; Kumar, 2006; Deb et al., 2006; Selokar, 2011; Bano, 2011).

As a part of the open ended questionnaire, the respondents were asked whether they would like their children also to be in the same profession i.e. policing. It was an indirect way to ascertain respondents' feeling about their job. It was presumed that if the respondent's response is positive it may be indicative of their favorable disposition towards their jobs. Almost all the respondents responded to this question. Responses indicated that most of the respondents are not favorably disposed towards their jobs. The analysis of the question indicated that 73% of the respondents would not like their children to be in police department while only 19% reported that they would like their children to be in police. Remaining 8% respondents indicated that they would like their children to make the choice profession on their own (Table 5.6b).

**Table 5.6b: Opinion about Children's Career**

Factors	Number of Responses (N=481)	Percentage
I would not like the children to choose police department	351	72.97
I would like the children to choose police department	91	18.91
I shall let children decide their profession	39	08.10

On the basis of these findings, it may be inferred that police personnel are experiencing stress. Findings of the study helped identify key stressors contributing to stress among police personnel. Comparison of findings of the study with other occupational groups suggests that the problem of stress among police personnel is more grave than most of other occupational groups. Around half of the police personnel are experiencing medium high stress while around 11% of the respondents are experiencing very high stress. The condition is so gloomy that most of the respondents don't want their children to be in the same profession. It is therefore imperative to initiate timely interventions. Stress among police personnel directly affects the society. The next chapter presents managerial implications of the study. It also takes a stock of various coping strategies as well as organizational intervention for police personnel of India.

# *Chapter – 6*

## *Conclusion, Managerial Implications & Future Research Directions*



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## Chapter 6: Conclusion, Managerial Implications & Future Research

### Directions

In the previous chapter, results arising out data analysis were presented. This chapter presents conclusion, managerial implications and future research directions of the study. The chapter begins with a summary of findings. This is followed by conclusion and the managerial implications. Implications have been divided into three groups, i.e., *implications arising out findings with respect to personality traits*, *implications based on results of organizational role stress* and *implications emerging out of interface of personality traits and organizational role stress*. The chapter suggests stress management interventions for police personnel of India. In the end, it suggests the future research directions so that this effort can be extended further. This shall help deepen our understanding on the phenomenon.

#### 6.1 Findings in respect of Role Stress

- **Overall Results;** The study revealed that police personnel are experiencing moderately high level of stress. However, a significant chunk of police personnel are experiencing rather high level of stress.
- **Key Constituent Stressors;** *Inter Role Distance* emerged as most potent stressor among police personnel followed by *Resource Inadequacy* and *Role Stagnation*.
- **Results as per Occupational Groups;** The study revealed that police personnel are experiencing highest level of stress vis-à-vis other occupational groups.
- **Results as per Type of Organization;** Civil police personnel are experiencing more ORS than armed police personnel. The major stressors responsible for this difference are IRD, RS, RO, RI, SRD and RIn. Maximum difference has been observed on IRD between civil and armed police. Although both groups are experiencing highest stress on this stressor but civil police personnel reported very high *Inter Role Distance*. Another major significant difference has been observed on RI between the two groups. Civil police personnel are experiencing higher RI than armed police.

- **Results as per Rank;** Lower rank police personnel are experiencing more role stress than middle and senior rank police officers. Significant differences have been observed on all stressors as per rank. IRD emerged as most potent stressor for all police personnel irrespective of their ranks. Significant differences have been observed on RA followed by PI and SRD. These stressors are not that bothersome for senior officers. However, lower rank police personnel are experiencing problems due to these stressors.
- **Results as per Marital Status;** No significant difference is observed among the respondents as per their marital status with respect to overall ORS. Significant difference has been observed on *Personal Inadequacy* in these two groups. Married police personnel are experiencing higher PI than unmarried police personnel.
- **Results as per Gender;** Female police personnel are experiencing higher ORS than their male counterparts. The stressors responsible for this difference are IRD, RS, RIn and RO. Although IRD is most potent stressor for both the group, female police personnel are experiencing very high IRD. Another major difference has been observed on RS. Female police personnel are experiencing higher RS than males.
- **Results as per Religious Affiliations;** No significant difference is observed among the respondents on overall ORS as per their religious affiliations. As regards individual stressors, only one significant difference has been observed on *Role Ambiguity* only. Hindus are experiencing more RA than Muslims.
- **Results as per Educational Attainments;** Less qualified personnel are experiencing higher level of ORS than moderately and highly qualified police personnel. Maximum differences have been observed on two stressors i.e. RA and REC. Less qualified police personnel are experiencing higher ambiguity and conflicts than the respondents having higher level of educational attainments.
- **Results as per Length of Service;** Significant differences have been observed on overall ORS among respondents having varying length of experience groups. Respondents belonging to early hard core police phase reported higher level of ORS than other groups. As regards constituent stressors; RO accounts

majorly for difference as per length of service. Police personnel in early hard core policing phase are experiencing higher level of RO than other groups. Significant differences have also been observed on IRD and RI. Police personnel in early hard core policing phase are experiencing higher stress on account of these stressors.

- **Results as per Place of Posting;** Rural police personnel are experiencing higher ORS than their urban counterparts. Significant difference has been observed on IRD with rural police relatively more stressed on this account. In addition, rural police is experiencing higher RI than urban police. Difference has also been observed on RO with rural police emerging as more stressed group on this account as well.
- **Results as per Districts;** Significantly different stress was reported among respondents across districts. RI accounted majorly to this difference. *Kannauj* police is experiencing more *Role Isolation* than other district police forces. *Kannauj* police is reported experiencing more stress on RO as well.

## 6.2 Findings in respect of Personality

- **Overall Results;** The findings of the study revealed that police personnel have significantly varied personality orientations. *Activity* orientation emerged as the prominent personality trait among police personnel followed by *Aggression-Hostility* and *Sociability*.
- **Results as per Gender;** Respondents reported significant differences on two personality traits namely- ImpSS and N-Anx across gender. Male police personnel are reported to be high *Sensation Seekers* while females reported higher scores on N-Anx.
- **Results as per Age;** Significant differences have been observed on three personality traits, namely- Act, Sy and ImpSS. The mid-senior age group was found to be most active. The senior most age group scored higher on *Sociability* and *Sensation Seeking*.
- **Results as per Length of Service;** As per length of service, significant differences have been observed on four personality traits, namely- Act, Sy, Agg-Host and N-Anx. The most experienced group reported to be most active and most social. It also reported higher score on *Aggression-Hostility* and

*Neuroticism-Anxiety*. But, Middle experience group scored highest on *Neuroticism-Anxiety*.

- **Results as per Rank;** Police personnel reported significant differences on three personality traits namely- Sy, ImpSS and N-Anx as per their ranks in the hierarchy. Lower rank police personnel were found to have highest scores on *Sociability*, *Impulsive Sensation Seeking* and *Neuroticism-Anxiety* compared to other hierarchal levels.
- **Results as per Type of Organization;** Significant differences have been reported on two personality traits namely- Agg-Host and N-Anx as per type of organization. Civil police personnel reported higher score on Agg-Host compared to armed police personnel while armed police reported higher scores on N-Anx than civil police personnel.
- **Across Educational Attainments;** On the basis of qualification, no significant difference has been observed on any personality trait.

### **6.3 Findings with respect to relationship between ORS and Personality Traits**

- The study reports significant correlation between various personality traits and ten constituent stressors of ORS. Further, Personality traits of police personnel had significant impact on overall ORS scores.
- Except *Activity*, remaining four personality traits exhibited a positive correlation with various constituents of ORS. Similarly, except *Activity*, other personality traits namely- *Sociability*, *Aggression-Hostility*, *Impulsive Sensation Seeking* and *Neuroticism-Anxiety* are found to have significant impact on total ORS among police personnel.

### **6.4 Conclusion**

In the light of above findings it can be concluded that police personnel in India are exhibiting clear signs of high work related stress. *Inter Role Distance*, *Resource Inadequacy* and *Role Stagnation* emerged as three key stressors among police personnel. Interventions are needed to cope with this stress. It can also be concluded that personality traits have a significant influence/ impact on stress among police personnel. Factors that can reduce an individual's stress level include individual factors (personality, coping and psychological health), familial

factors (functioning and support of a family) as well as extra-familial factors (support from the community) (Marais & Stuart, 2005).

The study also suggests that certain combinations of the personality traits such as *Sociability*, *Aggression-Hostility* and *Neuroticism-Anxiety* are important for stress in police personnel. *Non grant of leave* and *Exploitation by Senior Officers* have emerged as two most potent stressors among Indian police personnel. Police organizations should also analyze its consequences on effectiveness of police force. The study suggests major reforms in police organizations and also job redesign and job enrichment of the police personnel especially for lower rank. In addition, the field of stress still lacks an integrative framework which can explain the phenomenon and the majority of research results logically, under an established theoretical framework. There is a realization that stress, whether at workplace or elsewhere should be designed keeping the specific target group i.e. police personnel in mind. The individual personnel should remain at center-stage of any effort of stress management.

A stress free police shall ensure effective working of police organizations. This will result in reducing crime rate. Investigation of police stress carried out in the present study is expected to increase awareness of the problem especially at the lower rank police personnel. It may become the basis for launching interventions to address the problem of stress among them. The combined approach of human relationship expertise and human resource management could help address the issue of stress among police personnel. The conclusion of the study largely corroborates the existing literature in the area.

The need for a study like the present one is pressing. The increasing rates of suicides and illness among police personnel reveal that the police personnel of India are beginning to crack up (Mathur, 1999). The recognition, diagnosis and management of stress among the police is need of the hour. The findings of the study are expected to make valuable contribution to literature of police stress in India. The next section presents managerial implications based on the findings of the study.

## **6.5 Managerial Implications**

### **6.5.1 Implications based on Role Stress**

As have been noted earlier, police personnel are experiencing substantially high role stress. Stress among police personnel may lead to *poor health, job burnout, job dissatisfaction, increased chronic stress, depression, heart disease, stomach disorders, alcohol, drug use and abuse, marital disharmony, mental illness and suicide* at individual level. It may also lead to *absenteeism, turnover, less quality and poor relationship at workplace* at organizational level. At societal level, police stress may lead to increased crime rate, lesser efficiency and effectiveness of police force in handling criminals and overall disturbance to peace and order. It has been noted earlier that work stress in general costs US business \$300 billion annually. However, estimates how much stress cost is not available in India. However, there are sound reasons to believe that stress costs, whether in India or elsewhere. Police stress influences not only individual officers and police organizations but society as a whole. Therefore, it needs to be managed. The findings of the study buttress the need of implementing stress management interventions among police personnel of India.

There are two aspects of the management of stress in organization. One is at individual level and second is at organizational level. The effort on the part of an employee to manage stress at individual level is called *coping*. The second level is the effort of the organization to manage stress among its members. These organizational efforts are called *organizational interventions* or *stress management interventions*. Both coping and organizational interventions are important for successful management of stress in organizational setting.

#### **6.5.1.1 Coping with Role Stress**

Research in the field of stress illustrates the growing belief that coping is a fundamental element in the relationship between stressors and strain (Oakland & Ostell, 1996, Lazarus, 1999), but there is still lack of knowledge about how individuals actually cope (O'Driscoll & Cooper, 1996). Greenglass et al. (1998) stated that an individual's burnout levels depend not only on stressful events in the work environment, but also on the availability of coping resources. Several studies have suggested that providing police officers with better methods of coping with

stressful situations could ameliorate some of detrimental health effects (Anshel, 2000; Revel, 2006). As with the concept of stress, coping has been defined in variety of ways. It has been defined as a psychoanalytical process, as a personal trait or style, as a description of specific strategies, as a process and as a taxonomy of strategies (Dewey et al., 1993). Traditionally, coping has been conceptualized as a stable trait or some enduring behavior or characteristics of the person (Stone et al., 1991). According to transaction theory of coping, coping are thoughts and actions that are initiated in response to specific encounter and that change over time as efforts are reappraised and outcomes are evaluated. This implies a dynamic interaction between the person and the environment (Folkman, 1982). The word coping has been used mainly with two purposes- *ways of dealing with stress* and the *efforts to 'master' conditions of harm, threat and challenge*.

There are two different ways in which an individual copes with stress. The person may suffer silently or deny the experience of stress. This is called a *passive approach*. Alternately, the person may decide to face the challenge and make an effort for neutralizing the stress. This is called as *active approach*. Pareek (1993) has identified two types of coping strategies to handle stress: *dysfunctional* and *functional*. Generally effective coping strategies are 'approach' of *problem-focused* strategies, which confront the problem of stress as a challenge, and increase the capability of dealing with it. It includes strategies for gathering information, making decisions, planning, and resolving conflicts. In comparison to approach strategies, less effective strategies are *avoidance* or *escape* or *emotional-focused* coping strategies. It includes denying existence of stress, looking at the brighter side, or behavioral strategies such as seeking emotional support, drinking and taking drugs. Both sets of strategies for different role stressors of ORS have been summarized in Table 6.1.

Police personnel generally use *avoidance coping* strategies. They frequently deal with stress by smoking, having a drink, getting away from people (losing social support) and finding activities to take their mind off their problems (Jackson & Maslach, 1982). Monk (2004) found that active coping styles correlated negatively with distress. Nortje (2003) and Wiese et al. (2003) reported that police personnel using *active coping* strategies experienced higher level of professional



efficacy. Sehgal (1997) reported a significant negative correlation between approach coping style and total organizational role stress. On the other hand, Srivastava (1991) noted that persons using approach coping experienced more role stress than the avoidance group. It can be concluded that generally *active coping* strategy is more effective than avoidance coping strategy. In the next section, coping mechanism for individual stressors are presented.

**Table 6.1: Dysfunctional and Functional Coping Strategies for Role Stress**

Stressors	Dysfunctional Strategies	Functional Strategies
Inter Role Distance	Role Partition/ Role Elimination	Role Negotiation
Role Stagnation	Role Fixation	Role Transition
Role Expectation Conflict	Role Taking	Role Making
Role Erosion	Role Visibility	Role Development/ Role Enrichment
Role Overload	Role Reduction	Role Slimming
Role Isolation	Role Boundedness	Role Linkage
Personal Inadequacy	Role Shrinkage	Role Linkage
Self Role Distance	Role Rejection/ Self Rejection	Role Integration
Role Ambiguity	Role Prescription	Role Clarification
Resource Inadequacy	Role Atrophy	Resource Generation

Source: Pareek, 1993

- **Coping with Inter Role Distance;** IRD is a conflict between organizational and non-organizational roles. It has emerged as most potent stressor for police personnel with a mean score of 2.71. The ill effects of stress may be reduced by altering self-expectations and behaviors without changing other people's attitudes. This may involve taking a personal decision to limit activities in the career, spousal, parental, and social role etc. These dysfunctional strategies include eliminating roles such as restricting societal and religious duties. The dysfunctional approach of handling IRD may either be *Role Partition* and *Role Elimination*. In Role Partition, the person may partition the work role and non work role clearly. In Role Elimination he accepts one role at the cost of the other. Such police personnel ignore their family duties for career growth. They may rationalize their behavior that they would compensate this loss by making

a unique contribution to their organization and society. However, this is an avoidance approach.

A functional approach to the problem may be *Role Negotiation*. Role Negotiation is a process of establishing mutuality among roles and getting necessary help to fulfill work and non-work expectations more effectively. This is an attempt to alter other people's expectations of a particular role. For instance, a husband may negotiate with her wife that she should also shoulder some non-domestic responsibilities or vice-versa. Similarly police personnel may also negotiate with his/her colleagues regarding family problems. Sometimes it is really helpful to discuss problems with peer groups. Violanti (2005) and Loo (2005) suggested that sharing problems with family members or friends may reduce stress among police personnel. Stratton (1981) noted that since the extra pressures on police personnel and on their spouses cannot be eliminated, police department may consider ways of making the situation better and possibly even productive. Burke (1997) proposed some intervention programmes for police personnel such as, police spouse support group, a couple of workshops that both educates and addresses concrete issues, the inclusion of work-family content in training and development activities and counseling programs. This open communication and awareness could help in successfully negotiating the problems of IRD stress in India too.

- **Coping with Role Stagnation;** *Role stagnation* has emerged as the third most potent stressor among police personnel especially prominent among lower rank personnel. The feeling of RS may be on two accounts. It may occur when an individual gets into a new role as a result of his advancement in the organization. He may apprehend that new role requires skills that he does not have. In such a situation, he may continue to play the previous role about which he is sure, and which he has been performing successfully. This is called *Role Fixation*. However, it is an avoidance strategy. A functional strategy to cope with RS is *Role Transition*. It is a process by which a previous role, howsoever successful and satisfying it may have been, is given up to take up the new role. However, in case of police personnel the problem of *Role Stagnation* is due to limited promotional opportunities. It is also found from

the content analysis that lack of promotion is a major cause of distress among police personnel. Craines & Termier (1983) reported lack of promotional opportunity to be the most powerful predictor of both frequency and intensity of emotional exhaustion. As discussed earlier, the police organization has a very wide base with a very narrow top. Thus promotional opportunities are very limited. Police personnel should try to develop a positive attitude towards career. They should try to accept the reality and bend themselves well in the policing culture. They are also suggested to get more educational attainments so their chance of promotion might be increased.

- **Coping with Role Expectation Conflict;** In the present study, police personnel are reported experiencing low medium *Role Expectation Conflict* but it is almost touching to high medium stress level. This suggests that they are facing conflicting expectations from different members of the role set like superiors, their own peers and members of the public. The avoidance approach to deal with this stress is *Role Shrinkage* i.e. eliminating those expectations from the role that are likely to be in conflict with others' expectations. It is the act of pruning the role in such a way that some expectations are given up. Mostly police personnel use this approach to avoid conflicting expectations. But it is a dysfunctional approach since the advantage of performing a larger role is lost. The approach strategy of dealing with this conflict is *establishing linkages with other roles*. The problem may be solved by devising some new ways of negotiating conflicting expectations. The police administration especially senior police officers ought to own up this responsibility of helping several groups of police personnel in solving this problem. Another approach to reduce REC is to change one's attitude toward and perceptions of one's role expectations, as opposed to changing the expectations themselves (Hall, 1972). It is up to the organization to reduce the role conflict and clarify organizational roles so that REC can be eliminated or reduced. REC may be reduced by increasing formal communication with employees (Robbins, 1996). Each job should have well laid out expectation, the necessary information and support so that the job holder is not left with conflicting

demands of his/her role (Mathur, 1999). The role occupants may then experience both the process of growth and satisfaction.

- **Coping with Role Erosion;** The police personnel overall are experiencing high medium level of stress on *Role Erosion*. It suggests a perception of the role no longer having important functions in it or that such functions have been stripped from the role. The usual reaction in this situation may be that the individuals may fight for the rights of the role. However, this may not solve the problem as the basic conflict may continue. In order to solve the problems, such interventions are required that help role occupant recognize and increase the significance of his/her role. Here the functional strategy is *Job Enrichment*. Careful managing of task design may be an effective way to cope with stress. Enriching jobs to give police personnel more responsibility, more meaningful work, more autonomy and increased feedback can reduce *Role Erosion* because these factors give the employee greater control over their work activities and lessen dependence on others (Robbins, 1996). These enriched jobs will eliminate the stressors which are found in more routine and structured jobs (Luthans, 1995).
- **Coping with Role Overload;** Police personnel are experiencing overall high medium stress on *Role Overload* in the present study. Role overload is a feeling of having too many or too difficult expectations from several sources. While facing the problem, the role occupant may prepare a list of functions in terms of priorities. He may give priority to important functions. This prioritization may help place things in order of importance. However, then the less familiar or less comfortable roles may be pushed lower down in the priority list and neglected. Job profile of police personnel is changing rapidly. Consequently, newer roles are being added to the existing roles. However, the person may prefer to perform such functions which he may do without additional effort. Similarly, the functions that are new and emerging may remain at lower level of priority and may thus remain neglected. However, this is an avoidance strategy. Role overload has two aspects namely- quantitative and qualitative.

A functional approach of dealing with quantitative *Role Overload* may be through *redefinition of roles*. The police personnel may be exposed to time management approaches so that they might learn to utilize their time effectively in productive works. Other strategies may be effective planning of the work, prioritizing the work and delegation of responsibilities. Aspects of the role for particular police personnel, amenable to delegation, may then be identified. They may be assigned to another person in the role set after necessary training. Another aspect of quantitative overload is lack of equitable distribution of work (Robbins, 2003). With the job demands a police officer faces, the workload becomes more unbearable when another work colleague is not taking full responsibility for his or her own job description (Wiese et al., 2003). This emerges as a serious problem in police organization in India. There is a need to rationalize the allocation of work among police personnel lest some police personnel bear the most of the burden while other takes it easy (Talib, 1999). Police personnel should be prepared mentally and emotionally. They need to make an effort to get enough sleep and seek social support from colleagues & friends reduce the feeling of quantitative *Role Overload*.

*Role overload* is also qualitative in nature. As discussed earlier, the number and nature of crimes and criminals are increasing day by day in the country. This changing profile of crime and criminals requires a more adept handling. Expected norms of behavior of police have also come under scrutiny. There is a need for identifying training requirements at different levels of police hierarchy. Training is required on three dimensions namely - skills, knowledge and attitude. The appropriate mix may be ascertained for different levels of police hierarchy. Police personnel should engage in stress reducing activities viz. exercise, Yoga & meditation. They may seek professional counseling and take comfort in spiritual beliefs. As discussed earlier, the problem of RO may be due to shortage of police force in the country. Therefore, police organizations may recruit at least sanctioned number of police personnel to reduce this problem.

- **Coping with Role Isolation;** *Role Isolation* has also emerged as a potent stressor for police personnel with the mean value of 2.19. It is defined as a feeling of tension and distance between two roles in an organization. The role occupant may negotiate this problem by playing his role efficiently but avoiding interaction with others. The role occupant, thus, confines himself to his own role. This is called *Role Boundendness*. This strategy avoids possible conflict with other role occupants. But this is a dysfunctional strategy as it does not help the individual play his role in the larger interest of the organization. Policing requires high level of team work. The environment of mistrust among various roles could be extremely harmful for the organization. A functional approach to cope with RI is developing *Role Linkages*. There is need for open communication across various level of police hierarchy. The study shows that this issue is a cause of concern especially among lower rank personnel. In order to be effective, police force must act a cohesive unit. Lack of cohesiveness among police force may reduce morale. If a police personnel feels isolated and is not sure of support in times of need he will not put an extra efforts for organizational goals. He is then likely to perform the job in a routine manner. Thus, it is needed from organizational perspective to provide personnel two-way flow of information and organization should make efforts to develop cohesiveness among police forces. Police personnel should seek social support from colleagues. They may engage in sports activities as well to reduce RI.
- **Coping with Personal Inadequacy;** Police personnel reported lowest stress on this count with a mean value of 1.78. Lower ranked police personnel are experiencing higher stress on this account. The stressor suggests a perceived feeling of competence for effective job performance. However, those personnel who do experience stress on this account, may resort to *Role Shrinkage*. They may perform only such roles that they are capable of performing. The police personnel are required to perform a variety of jobs. They are often involved in handling crimes and tackling insurgency. This demands newer skills as they encounter highly motivated criminals armed with sophisticated weapons. In addition, now white collar crimes like *cyber*

*crimes, copyright infringement, money laundering* are increasing. Then, in addition to skills, the personnel require knowledge base also to understand emerging issues such as concern for Human Rights while safeguarding the interest of the nation. The changing profile of their job requires proper attitudinal training also. This again calls for a comprehensive review of the training needs of different groups of police personnel. As lower ranked personnel are experiencing higher stress, the focus of training should now shift from training of the senior and middle level to the lower rank of police personnel. The police personnel at the firing line determine the effectiveness of the force. Thus, a special effort should be initiated for identification and then imparting of training of police personnel.

- **Coping with Self Role Distance;** *Self Role Distance* has also emerged as a major stressor among police personnel. Overall, police personnel reported medium high stress on this account. It shows the conflict between the incumbent's self-concept and demands of role he occupies. The problem is severe in lower rank police personnel. When faced with such a situation the role occupant may play the role in a routine way to earn his living. He may take no real interest in his role (Talib, 1999). This is an approach of *Role Rejection*. In addition, he may gradually occupy his role and in due course may completely forget his self-concept. He may then reject his self. It is *Self Rejection* approach. In either case it is an avoidance approach. If a police personnel rejects his role, he is likely to be ineffective. On the other hand, if he rejects the self, he is likely to lose his effectiveness as an individual. Both the situation may lead to mental illness. The functional strategy of dealing with such stress is to attempt *Role Integration*. The police personnel may analyze aspects of the role causing SRD. He may then identify some aspects of the role in which he may use his strengths. An attempt may be made to *grow into role* and *make the role grow* to use the special capabilities of the person. This would result in *Role Integration*. This would help the individual to make closer his self concept and the role which he is occupying. This process is difficult but it can be achieved with systematic efforts. Again, police personnel may try to adjust themselves in policing culture. They should try to develop

plans and priorities. Police personnel usually face this distance. Therefore, it is necessary for police organizations to discuss the aspects of policing that are causing stress among them in an open manner. Then only such integration in role can be achieved successfully.

- **Coping with Role Ambiguity;** *Role Ambiguity* has not emerged as a major stressor among police personnel. Yet, it is a problem among police personnel professing Hinduism. As *Role Expectation Conflict*, the dysfunctional approach for dealing with *Role Ambiguity* is to make the roles clear by providing full job descriptions and specifications. This is called *Role Prescription*. The individual may remove ambiguity by fitting into the role as described in role expectations. This is the process of *Role Taking*. However, this is an avoidance strategy. The alternative approach may be to seek clarification from various sources and to define the role in the light of those clarifications. A creative way to cope with RA is to define the role according to one's own strengths. The role occupant may be helped to look into aspects of the role that he finds challenging. This is a process of *Role Making*. This can be done by proper two way communication to seniors, subordinates and peer groups. This will result in motivation, job satisfaction and organizational commitment of the police personnel. Thus, role of *Gazetted* and *Non-Gazetted* officers is crucial in opening channels of communication in the organization in order to reduce role ambiguity in the organization. Hindus are experiencing higher RA than Muslims. The issue needs further exploration whether this is a chance finding or substantial causes behind the finding.
- **Coping with Resource Inadequacy;** *Resource Inadequacy* emerged as the second most potent stressor among police personnel. This represents a perceived feeling of lack of resources required for effective performance in terms of information, people, material, finance, facilities etc. Major concern areas on this account are inadequate pay, poor infrastructure, lesser facilities and accommodation problems. Policing is a costly affair. In terms of sheer numbers, it requires 15.63 *lakhs* police personnel in the country. In Uttar Pradesh alone, there are 1504 police stations, 398 police out-posts and 33 state armed police battalions. For the financial year 2010-11, Rs. 6997 *crores* were



sanctioned as policing expenditure in Uttar Pradesh. This is around 4.57% of the total sanctioned budget for the state (BPR&D, 2011). But, often there is temptation among budgetary planners to cut the expenditure on this front. Moreover, the physical facilities of the police depreciate at faster rate because of the regular use. Therefore, there is a need for generating the resources for effective policing like infrastructure, increment in salary, other benefits and facilities, infrastructure and replenishment of arms. When faced with this stress, police personnel may resort to a strategy of *Role Atrophy* which is dysfunctional approach in this account. It is an act of wasting away the role due to not getting sufficient resources. This approach should not be used because it will develop a pessimistic approach among police personnel. The functional approach dealing with this stressor is *Resource Generation*. It is the responsibility of the policy makers to evaluate the need of the police department. They must keep in mind the cost of ineffective policing are grave. Police personnel should not waste resources and they should utilize them effectively.

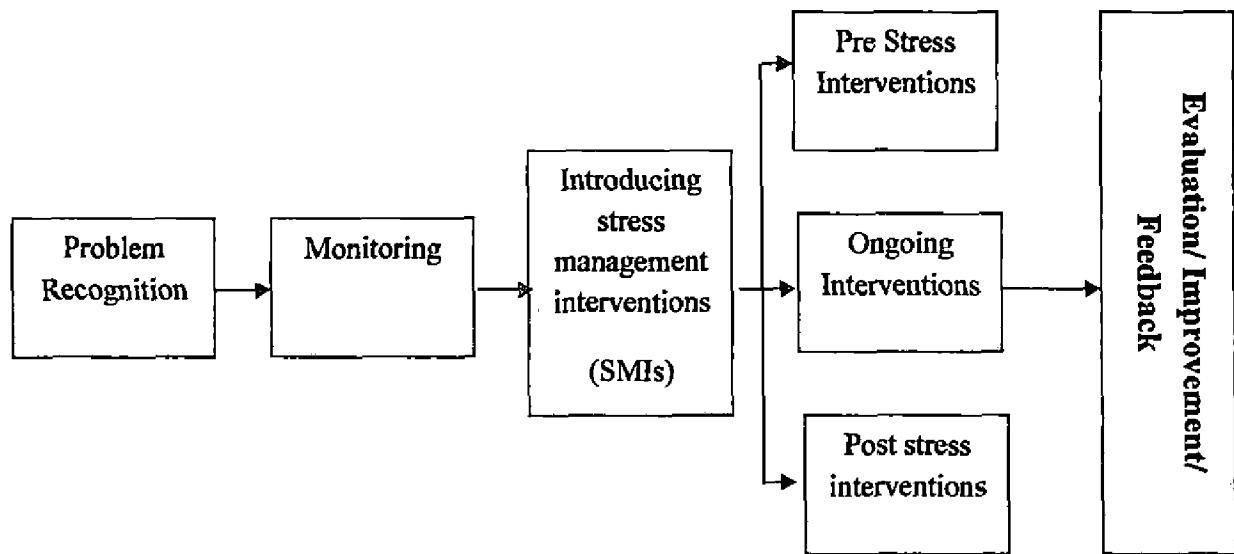
The section presented individual coping strategy. In the next section, stress management interventions by organizational end are discussed.

#### **6.5.1.2 Organizational Interventions**

Besides coping individually, police organizations also need to initiate measures for management of police personnel stress. The various organizational measures to manage stress are called *organizational interventions*. There are four steps involved in these Interventions, namely, *problem recognition*, *monitoring stress signs*, *initiating stress management interventions* and finally *evaluating the process* based on continuous feedback (Figure 6.1).

The main step in management of organizational role stress is to *recognize stress* as a police organizational problem and not merely an individual's problem. This recognition calls for a paradigm shift, in which facilities and programmes aimed at reducing stress in the workplace are considered an investment, not an expense.

**Figure 6.1: Process of Stress Management interventions**



As a next step, the police organization must *monitor the sign and symbols of stress* on a regular basis. Police personnel's declining performance, morale, relationship and absenteeism etc. may provide a clue that police personnel are experiencing stress at workplace. A distinct *decline in output with no clear reason, low mood, loss of interest in work, poor concentration, reduced energy, sleep disturbances, loss of appetite, chest pains and withdrawal symptoms* may indicate decline in police personnel's performance. If motivation of police personnel decreases, it indicates lesser commitment to organization. Stress may also be reflected by *poor relationship at workplace, conflict with colleagues and deterioration of team spirit. Incidence of vague illness, breaks from work, frequent mistakes, forgetting appointments or deadlines, increased smoking or drinking, late arrivals* also indicate stress. Police department may design formal surveys for gathering input about nature and intensity of stress among police personnel. These stress audits may also help identify perceptions of police personnel about their job. The data required for stress audit can be collected through questionnaires, interviews and physical examinations (Pestonjee, 1987).

Once it is established that particular police organization is encountered with organizational role stress, police organizations and policy makers ought to *introduce stress management interventions*. Three steps involved in these

interventions are *pre-stress interventions*, *ongoing interventions* and *post-stress interventions*.

- **Pre-Stress Interventions**

The study indicates that police personnel are experiencing moderately high role stress. Most stress management programs among police personnel are directed towards responding to the problems as they arise, with little emphasis on preventing the potential problems. Pre-stress or primary interventions are based on the assumption that the most effective way to eliminate stress is to address the sources of stress in work environment. Careful assessment of specific stressors for police personnel is the key to preventive interventions. The main focus of these interventions is on modifying or adapting the physical or socio-political environment to meet the needs of the workers. This includes structural *changes in organization*, *job redesign* and *changes in the social system* within police department. Before, introducing an intervention, police personnel should be informed about the actions that will be taken and the time frame. This reduces resistance from police personnel to structural or physical changes. A strong commitment from senior police officers is essential for successful implementation of pre-stress interventions. There must be fair and unbiased grievance system to provide police personnel an opportunity to vent their frustration through established channels. It is also necessary that *promotion*, *salary*, *performance appraisal* and other *rewards* are dispensed on the basis of merit rather than favoritism or political pressure (Elliot & Jarrett, 1994).

There is need of structural changes in police organizations, job redesign and change in policing culture. Further, a team of senior police officers can assess specific stressors for police personnel systematically. Then, these stressors may be eliminated by suitable organizational practices. A system of regular feedback from PP may help organization in stress management interventions.

- **Ongoing Stress Management Interventions**

The study revealed that limited training of stress management is imparted to police personnel. The majority of workplace interventions are designed to deal with ongoing stress related problems among police personnel. Most of the

programs are in the form of organizationally sponsored stress management and health promotion programs (Auerbach & Gramling, 1998). The *ongoing stress interventions* are also called as *secondary* or *moderating interventions*. The scope can be both preventive and/or reactive. The aim is to modify or moderate individual response to stressors. The main aim of this intervention is to enhance the *stress tolerance limit* (STL). Police organizations may use various training programs such as *sharing stress related information, stress management training, resilience training, spouse involvement programs, police personnel involvement programs* in decision making or employee wellness programs to reduce or eliminate individual stressors. These programs are not very costly and easy to implement.

*Inter Role Distance* has emerged as the most potent stressor in the present study. Therefore, *spouse involvement program* is an instrument for organizations to reduce work-family conflicts. It has also been observed that problem-solving seminars could be useful in reducing work-family conflict. It has been noted that role of organizational support is important in decreasing work family conflict when employees lack the personal coping strategies required (Somech & Drach-Zahavy, 2012). As discussed earlier that policing is one of the most stressful occupations. It needs high level of social support which could reduce the levels of *psychological, physical* and *behavioral* strain among police personnel. Even if the stressor persists, the existence of support provides some comfort (Jex, 1998). On the other hand, organizationally supported wellness programs focus on employees' total physical and mental condition (Wolfe et al., 1987). These programs help police personnel *quit smoking, control alcohol abuse, lose weight, eat better* and *develop a regular exercise habit*. Police organizations in India also need similar *spouse involvement programs, wellness programs* and *sharing information programs*. It will certainly reduce the stress among police personnel.

- **Post-Stress Interventions**

These are tertiary level stress management intervention program. Here assistance is provided to stressed police personnel to help or cure the symptoms of stress. Interventions at this level are based on a treatment rather

than prevention. The prime concern of this intervention is to minimize the adverse consequences of stressors by helping individuals cope more effectively. Police organizations may organize *employee assistance program* (EAP), *mental health program* (MHP) and *counseling* to the stress prone personnel. Police organizations may organize stress relieving programs like *breathing regulation*, *muscle relaxation*, *nutrition management*, *yoga* and *meditation* to help police personnel. Tertiary interventions have three components, namely, *psychological*, *physical* and *nutritional*.

*Psychological* treatment consists of *counseling*, *transcendental meditation*, *biofeedback*, *autogenic training* and various *therapies*. *Physical* treatment consists of yoga and other exercises. Research has reported that a host of yoga techniques consisting of some important *asanas* and *pranayams* are effective in meeting the requirement of psychosomatic balance (Swami, 2004). *Nutrition* also plays a significant role in healthy and stress free living (Romas & Sharma, 1995). Eating healthy diet enhances our coping abilities against various stressors and stressful events. A balanced diet also provides enough reserves to manage stress. Therefore, police organizations may provide psychological, physical and nutritional interventions to police personnel to cope with their individual stress effectively.

*Evaluation* is necessary to determine whether the intervention is producing desired effects and whether change in direction is needed. If the results are in line with the desired results, intervention employed should be continued. But, if there is much deviation, it should be re-evaluated with the help of feedback from the police personnel. Often one intervention is effective in one organization but not in another. The same applies to time and group also. There is a need for constant monitoring and periodic evaluation. Evaluation should be based on *expert group advice* and *personnel feedback* of aggrieved police personnel.

It may be noted that effective stress management among police personnel requires a holistic approach. It involves aggrieved police personnel, his/her colleagues, seniors and police organizations. It also involves person-environment relationship. The study has also identified specific stressors evaluated by police personnel. Table 6.2 provides stress management technique which may prove effective for

these stressors. It must be emphasized that empirical validation is required to ascertain the benefits of these stress reduction techniques. In the next section, implications in respect of personality traits are presented.

**Table 6.2: Management of Key Stressors among Police Personnel**

S. No.	Stressor	Individual	Organization
1.	Non Grant of Leave	<ul style="list-style-type: none"> <li>• Time Management</li> <li>• Good relationship at workplace</li> <li>• Positive thinking</li> <li>• Peer support</li> </ul>	<ul style="list-style-type: none"> <li>• Unbiased procedure</li> <li>• Transparency</li> <li>• Filling vacant posts</li> </ul>
2.	Non-fulfillment of family responsibilities	<ul style="list-style-type: none"> <li>• Time management</li> <li>• Good personnel planning</li> <li>• Social support</li> <li>• Networking</li> </ul>	<ul style="list-style-type: none"> <li>• Spouse involvement programs</li> <li>• Counseling</li> <li>• Police family clubs</li> <li>• Granting of leaves on time</li> <li>• Providing facilities</li> </ul>
3.	Exploitation by senior officers	<ul style="list-style-type: none"> <li>• Good relationship at workplace</li> <li>• Good performance</li> <li>• Assertion skills</li> <li>• Realistic expectations</li> <li>• Healthy expectations of organizational hierarchy</li> <li>• Build a support system</li> </ul>	<ul style="list-style-type: none"> <li>• Supervisory training</li> <li>• Supportive networks at workplace</li> <li>• Communication organizational policy</li> <li>• Survey feedback system</li> <li>• Grievance procedure</li> <li>• Flexible and humane approach</li> <li>• Employee participation</li> </ul>
4.	Political Pressure	<ul style="list-style-type: none"> <li>• Accurate knowledge of organizational rules and policies</li> <li>• Media help</li> </ul>	<ul style="list-style-type: none"> <li>• Lesser political involvement</li> <li>• Punitive measures against corrupt practices</li> </ul>
5.	Workload	<ul style="list-style-type: none"> <li>• Time management</li> <li>• Relaxation technique</li> <li>• Cognitive therapy</li> <li>• Goal setting</li> <li>• Personal planning</li> </ul>	<ul style="list-style-type: none"> <li>• Realistic expectations</li> <li>• Division of workload</li> <li>• Recruitment of force</li> <li>• Training</li> </ul>
6.	Unlimited duty hours	<ul style="list-style-type: none"> <li>• Relaxation technique</li> <li>• Nutritious diet</li> </ul>	<ul style="list-style-type: none"> <li>• Schedule working hours</li> <li>• Adequate manpower</li> </ul>

		<ul style="list-style-type: none"> <li>• Yoga</li> <li>• Guided meditation</li> <li>• Regular workout</li> </ul>	<ul style="list-style-type: none"> <li>and resources</li> <li>• Wellness programs</li> <li>• Training</li> </ul>
7.	Living away from family	<ul style="list-style-type: none"> <li>• Time management</li> <li>• Regular vacation</li> <li>• Peer support</li> <li>• Have some hobbies</li> </ul>	<ul style="list-style-type: none"> <li>• Grant of leave</li> <li>• Accommodation facilities</li> <li>• Opening police schools</li> </ul>
8.	Inadequate Salary/facilities	<ul style="list-style-type: none"> <li>• Budgeting</li> <li>• Career growth</li> <li>• Realistic expectations</li> <li>• Education</li> </ul>	<ul style="list-style-type: none"> <li>• Salary increment</li> <li>• Infrastructure</li> <li>• Provide benefits</li> <li>• Other facilities</li> </ul>
9.	Transfer/lack of promotions	<ul style="list-style-type: none"> <li>• Personal adjustment</li> <li>• Positive attitude</li> <li>• Hard work</li> <li>• Education</li> </ul>	<ul style="list-style-type: none"> <li>• Fair transfer policy</li> <li>• Fair promotion policy</li> <li>• Promotion of seniors</li> </ul>
10.	Lack of cooperation from public	<ul style="list-style-type: none"> <li>• Positive thinking</li> <li>• Realistic expectations</li> <li>• Conflict resolution skills</li> <li>• Confidence and competence</li> <li>• Uncorrupt practices</li> </ul>	<ul style="list-style-type: none"> <li>• Awareness programs</li> <li>• Counseling</li> <li>• Training</li> <li>• Employee assistance programs</li> </ul>

### 6.5.2 Implications with respect to Personality Traits

While certain jobs are more stressful than others, individuals do differ in their response to stress situations. For example, individuals with little experience or an external locus of control tend to be more stress prone (Robbins, 1996). The study reported that police personnel are exhibiting different personality orientations. The personality traits are having an influence/impact on stress level. The police organizations may administer personality tests at the time of selection and placement of police personnel. It will help select individuals more suitable for police job. Personnel selection is primarily concerned with the prediction of performance at work. Implicit in the use of personality testing is the assumption that personality traits are important determinants of performance; that variations in performance are related to variations in personality. Further, the linkage between personality and performance is based on the premise that there are relatively stable

differences in personality and that these differences determine how individuals perform in different situations.

This study revealed that desirable personality traits for police personnel are *Activity* orientation and being *Sociable*. However, certain other traits like being *aggressive, hostile, impulsive* and *sensation seeking* behavior affect the performance adversely. Further, personality traits like Neuroticism and anxiety also may have a detrimental effect on job performance. If personnel exhibits lower score on *Aggression-Hostility, Impulsive Sensation Seeking* and *Neuroticism-Anxiety*, it implies that he might not perceive adverse situations stressful. If such a police personnel exhibits an *Activity* orientation and *Sociability*, he may manage his stress well by sharing his problems with others and engaging in effective decision making. Use of personality measures in the law enforcement officer hiring process reduces the likelihood of hiring a dangerous officer (Varela et al., 2004). Such police personnel may be harmful to members of the public, to fellow personnel, and to the public's trust in law enforcement agencies. One more thing is noteworthy here. There is no such thing like ideal police personality. Some investigators have described the police as having positive personality attributes but most of the research has been concerned with negative aspects of personality such as *aggression, hostility, anger, impulsive, authoritarianism, cynicism* and *psychopathology*. Therefore, it is responsibility of police organizations to recruit police personnel with the help of personality assessment as policing is a potentially stressful occupation. A candidate who has higher scores on *type A personality type, external locus of control, trait anxiety, aggression, hostility, anger, impulsivity, neuroticism* may not be hired for policing duties. Even if such personnel get hired, the police organizations may design programs to help them addressing such personality traits that may come in the way of performing the duties effectively. Police organizations may also offer counseling services in order to help police personnel in socializing and adjusting in their work environment. In the next and final section of implications, suggestions based on interface of personality and stress are presented:



### **6.5.3 Implications emerging out of Interface between Personality and Stress**

The findings of the study have revealed that personality has both influence and impact on stress level among police personnel. Policing is one of the most stressful occupations. While recruiting the personnel, personality tests and psychological assessment is necessary in order to select those individuals who are fit for the job. Moreover, even if, persons who are not ideally suited for policing job get recruited, police organizations may design different stress management interventions for different police personnel based on their personality traits. Table 6.3 proposes some interventions based on the correlation analysis carried out earlier in chapter 5. Different coping strategies and management interventions have been proposed wherein inter correlation have been found between personality traits and various role stressors.

These strategies are in the form of proposals only. Further research is needed to understand implications of these interventions more specifically in the context of police organization.

**Table 6.3: Stress Management Interventions based on Personality profiles**

Dimensions	Activity (Act)	Sociability (Sy)	Aggression-Hostile (Agg-Host)	Impulsive Sensation Seeking (ImpSS)	Neuroticism-Anxiety (N-Anx)
Inter Role Distance (IRD)	easy grant of leave, time management, recreational facilities	easy grant of leave, time management, police family clubs	Counseling services, easy grant of leave, training	No Correlation	Spouse involvement programs, sensitivity training
Role Stagnation (RS)	No Correlation	Training, employee assistance programs, education	Employee assistance programs, meditation	No Correlation	Stress Relaxation programs, training, nutritious diet
Role Expectation Conflict (REC)	No Correlation	Training in conflict resolution skills, peer counseling	Counseling, Training of conflict resolution skills, understanding of job profile	Clear understanding of job profile, counseling	peer counseling, organizational support, orientation programs for family & friends
Role Erosion (RE)	Job rotation, job redesign, career growth education	Job rotation, job redesign	Job rotation, job redesign, counseling	Job rotation, job redesign, adventurous job profile	Job rotation, job redesign, counseling
Role Overload	No Correlation	Time management, realistic expectations	Division of work load, job enrichment	No Correlation	Personal planning, goal setting
Role Isolation (RO)	No Correlation	Two way Communication, sharing feelings, assertion skills	Counseling, improve inter-personal skills, supervisors support, incentives	No Correlation	improve inter-personal skills, supervisors support, supporting environment
Personal Inadequacy (PI)	No Correlation	Training of skills and knowledge	Training of skills, knowledge and attitude	Training of skills, knowledge and attitude	Training of skills, knowledge and attitude
Self Role Distance (SRD)	No Correlation	Training, counseling, role redesign	Training, counseling	Training, counseling	Training, counseling, communication
Role Ambiguity (RA)	No Correlation	Self awareness, training, group discussions	training, group discussions	No Correlation	training, group discussions
Resource Inadequacy (RIIn)	Ensuring resources, resources management	Ensuring resources, resources management	Ensuring resources, resources management	Ensuring resources, resources management	Ensuring resources, resources management

The discussion above focused on managerial implications in respect of personality traits and organizational role stress. There is need to explore the phenomenon of relationship between personality and stress further to increase awareness among police personnel and general public in India. This shall be the foundation for individual and organizational efforts to manage it. It requires an *official recognition of workplace stress* and illness from police organizations, society and government. The problem may be well tackled by application of health and safety legislations. Government need to recognize policing a stress prone job and make it mandatory to provide for an effective prevention system. There is also a need of separate commission and laws for governing workplace stress related issues. Such legal enforcement would facilitate the problem of stress. There is also a need of recruiting *Psychologists* and *Criminologists* at district level to contribute to this arduous task. The next section provides future research directions of the study.

#### **6.6 Future Research Directions.**

This research study has substantial scope of extension- both in terms of breadth as well as depth. Some of such areas are highlighted below:

- Breadth wise it may be extended to several other groups of police personnel. They may exhibit unique patterns of stress. In addition to law and order police, the groups involved in carrying out other auxiliary services may thus be studied. The differences could also be explored in changed geographical context. The districts where crime rate is higher could be explored and the results can be compared with those districts wherein the crime rate is relatively low. Comparative studies could be launched focusing on host of Central paramilitary forces. Comparison could also be carried out among states.
- Similar studies could also be carried out among police organizations of different countries. It will help explore the specific stressors in different context of policing. In addition, the cross cultural comparison may throw useful light in understanding this phenomenon better. It may also enable us to take stock of good practices to address the concern.
- Indian research studies on police stress have most used questionnaires that have a general orientation and that have been used in varied occupational contexts. Police organizations encounter specific stressors. Therefore, there is

a need to develop police specific questionnaires. This shall help understand reality of stress among police personnel more specifically.

- Understanding the sources of stress is just one aspect. Another aspect, perhaps even more important, is the management of stress. Existing literature on the subject reveals that management of stress is not that well researched area. A number of researchers are working in this field in western countries. There is need to crystallize approaches for handling this problem in different geographical as well as occupational settings. Management of stress in different organizational settings in the same organization as well as across the occupations is a pressing need of the hour.
- Future researches could explore personality profile of the police personnel more deeply. This study reported that police personnel are hostile. It could be researched why they are hostile and aggressive in comparison to general population. More research is also needed to develop stress management techniques based on personality traits of police personnel.
- The study focused on two variables only, namely- personality traits and stress. More variables could be included in longitudinal studies to understand their relationship with police stress in India such as job satisfaction, performance, burnout, vigor, depression, well-being, health, suicide ideation and coping styles.

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# *Appendices*

<b>Appendices</b>		
	Appendix 1 (Questionnaire: English Version)	
	Appendix 2 (Questionnaire: Hindi Version)	
	Appendix 3 (A note on Statistical Techniques used in the Study)	
	Appendix 4 (Research Publication)	

## Appendix 1: Questionnaire (English Version)

**Bushara Bano<sup>1</sup>**

Research Scholar

C/O Prof. Parvaiz Talib

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Aligarh Muslim University, Aligarh

Dear Respondent,

I am conducting a UGC sponsored research study on, "*Personality Types and its relationship with Role Stress: A Study among Police Personnel*". For this research purpose, I request you to kindly fill up the enclosed questionnaire.

I assure you that your responses will be kept strictly confidential and shall be used for academic purpose only. Your help in this regard would highly appreciate. The questionnaire has been divided into three parts. Please read the statements carefully and choose the option which you feel is the most appropriate.

I wish to thank you advance for valuable time spared in filling up the questionnaire.

Sincerely Yours,

**Bushara Bano**

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## Part 1: Zuckerman-Kuhlman Personality Questionnaire (ZKPQ-50-CC)

**Instructions:** On this page you will find a series of statements that you might use to describe yourselves. Read each statement and decide whether or not it describes you. Do not leave any item unanswered. Use the numbers given below to indicate your feelings.

**Write 0** If you are not agree with the statement

**Write 1** If you are slightly agree with the statement

**Write 2** If you are somewhat agree with the statement

**Write 3** If you are generally agree with the statement

**Write 4** If you are definitely or completely agree with the statement

1. I do not like to waste time just sitting around and relaxing. ( )
2. When I get mad, I say ugly things. ( )
3. It's natural for me to curse when I am mad. ( )
4. I do not mind going out alone and usually prefer it to being out in large group. ( )
5. I lead a busier life than most people. ( )
6. I often do things on impulse. ( )
7. I almost never feel like I would like to hit someone. ( )
8. I spend as much time with my friends as I can. ( )
9. My body often feels all tightened up for no apparent reason. ( )
10. I frequently get emotionally upset. ( )
11. If someone offends me, I just try not to think about it. ( )
12. I like to be doing things all of the time. ( )
13. I would like to take off on a trip with no preplanned or definite routes or timetables. ( )
14. I tend to be oversensitive and easily hurt by thoughtless remarks and actions of others. ( )
15. I do not need a large number of casual friends. ( )
16. I can enjoy myself just lying around and not doing anything active. ( )
17. I enjoy getting into new situations where you can't predict how things will turn out. ( )
18. I am easily frightened. ( )
19. If people annoy me I do not hesitate to tell them so. ( )
20. I tend to be uncomfortable at big parties. ( )
21. I do not feel the need to be doing things all of the time. ( )
22. I sometimes feel panicky. ( )
23. At parties, I enjoy mingling with many people whether I already know them or not. ( )
24. I sometimes like to do things that are a little frightening. ( )
25. When on vacation, I like to engage in active sports rather than just lie around. ( )
26. I'll try anything once. ( )
27. I often feel unsure of myself. ( )
28. I would not mind being socially isolated in some place for some period of time. ( )



29. I like to wear myself out with hard work or exercise. ( )
30. I would like the kind of life where one is on the move and travelling a lot, with lots of change and excitement. ( )
31. I often worry about things that other people think are unimportant. ( )
32. When people disagree with me I cannot help getting into an argument with them. ( )
33. Generally, I like to be alone so I can do things I want to do without social distractions. ( )
34. I sometimes do "crazy" things just for fun. ( )
35. I have a very strong temper. ( )
36. I like to be active as soon as I wake up in the morning. ( )
37. I can't help being a little rude to people I do not like. ( )
38. I am a very sociable person. ( )
39. I prefer friends who are excitingly unpredictable. ( )
40. I often feel like crying sometimes without a reason. ( )
41. I like to keep busy all the time. ( )
42. I often get so carried away by new and exciting things and ideas that I never think of possible complications. ( )
43. I don't let a lot of trivial things irritate me. ( )
44. I am always patient with others even when they are irritating. ( )
45. I usually prefer to do things alone. ( )
46. I often feel uncomfortable and ill at ease for no real reason. ( )
47. I probably spend more time than I should socializing with friends. ( )
48. When I do things, I do them with lots of energy. ( )
49. I like "wild" uninhibited parties. ( )
50. When people shout at me, I shout back. ( )

## Part 2: Organizational Role Stress Scale (ORS-Scale)

Read instructions carefully before responding on this sheet.

People have different feelings about their roles. Statements, describing some such feelings are given below. Use the answer sheet to write your responses. Read each statement and indicate, in the space against the corresponding number in the answer sheet, how often you have the feeling expressed in the statement in relation to your role in the organization. Use the numbers given below to indicate your feelings.

If you find that the category to be used in answering does not adequately indicate your own feelings, use the one which is closest to the way you feel. Do not leave any item unanswered.

**Write 0** If you never or rarely feel this way

**Write 1** If you occasionally feel this way

**Write 2** If you sometimes feel this way

**Write 3** If you frequently feel this way

**Write 4** If you very frequently or always feel this way

1. My role tends to interfere with my family life. ( )
2. I am afraid I am not learning enough in my present role for taking up higher responsibility. ( )
3. I am not able to satisfy the conflicting demands of various people above me. ( )
4. My role has recently been reduced in importance. ( )
5. My workload is too heavy. ( )
6. Other role occupants do not give enough attention and time to my role. ( )
7. I do not have adequate knowledge to handle the responsibilities in my role. ( )
8. I have to do things, in my role, that are against my better judgment. ( )
9. I am not clear on the scope and responsibilities of my role (job). ( )
10. I do not get the information needed to carry out responsibilities assigned to me. ( )
11. I have various other interests (social, religious etc.) which remain neglected because I do not get time to attend to these. ( )
12. I am too preoccupied with my present role responsibility to be able to prepare for taking up higher responsibilities. ( )
13. I am not able to satisfy the conflicting demands of my peers and juniors. ( )
14. Many functions that should be a part of my role have been assigned to some other role. ( )
15. The amount of work I have to do interfere with the quality I want to maintain. ( )
16. There is not enough interaction between my role and other roles. ( )
17. I wish I had more skills to handle the responsibilities of my role. ( )
18. I am not able to use my training and expertise in my role. ( )
19. I do not know what the people I work with expect of me. ( )

20. I do not get enough resource to be effective in my role. ( )
21. My role does not allow me enough time for my family. ( )
22. I do not have time and opportunities to prepare myself for the future challenges of my role. ( )
23. I am not able to satisfy the demands of clients and others, since these are conflicting with one another. ( )
24. I would like to take on more responsibility than I am handling at present. ( )
25. I have been given too much responsibility. ( )
26. I wish there was more consultation between my role and others' role. ( )
27. I have not had the right training for my role. ( )
28. The work I do in the organization is not related to my interests. ( )
29. Several aspects of my role are vague and unclear. ( )
30. I do not have enough people to work with me in my role. ( )
31. My organizational responsibilities interfere with my extra organizational roles. ( )
32. There is very little scope for personal growth in my role. ( )
33. The expectations of my seniors conflict with those of my juniors. ( )
34. I can do much more than what I have been assigned. ( )
35. There is a need to reduce some parts of my role. ( )
36. There is no evidence of several roles (including mine) being involved in joint problem solving or collaboration for planning action. ( )
37. I wish I had prepared myself well for my role. ( )
38. If I had full freedom to define my role, I would be doing some things differently from the way I do them now. ( )
39. My role has not been defined clearly and in detail. ( )
40. I am rather worried that I lack the necessary facilities needed in my role. ( )
41. My family and friends complain that I do not spend time with them due to heavy demands of my work role. ( )
42. I feel stagnant in my role. ( )
43. I am bothered with the contradictory expectations different people have from my role. ( )
44. I wish I had been given more challenging tasks to do. ( )
45. I feel overburdened in my role. ( )
46. Even when I take the initiative for discussions or help, there is not much response from other roles. ( )
47. I need more training and preparation to be effective in my work role. ( )
48. I experience a conflict between my values and what I have to do in my role. ( )
49. I am not clear what priorities are in my role. ( )
50. I wish I had more financial resource for the work assigned to me. ( )

**Part 3: Kindly fill up this questionnaire as well:**

1. What do you find most bothersome in your job?

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2. What, in your opinion, is most bothersome for your colleagues at the same level as yours?

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3. Please describe the last time you felt particularly uncomfortable in your job?

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4. Please describe the last time you felt particularly happy in your job?

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5. Would you like your children to be in the same profession as yours? Yes/No

Specify Reasons:

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*Thanks for your cooperation. We will get back to you with the analysis of your responses. We trust that it will help you assess your nature of stress. It will improve your personal effectiveness, further.*

### **Respondents' Profile**

Name:

Age:

Designation:

Qualification:

Experience (in yrs):

Organization:

Hierarchical level: Top / Middle / Lower

Gender:

Marital Status:

If married, your spouse is: Working/Non-working

Email Id:

Religion:

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Venue:

Smoking:

Date:

Drinking:

City:

Mobile No.

Signature:

## Appendix-2: Questionnaire (Hindi Version)

भाग-1

### ZKPQ- SCALE

निर्देश :- इस प्रश्नावली में आपको कथनों की एक सूची मिलेगी जिसका उपयोग आप स्वयं को व्यक्त कर सकते हैं। प्रत्येक कथन को ध्यानपूर्वक पढ़कर निश्चय कीजिए कि वह आपको व्यक्त करता है या नहीं। किसी भी कथन को बिना उत्तर दिए न छोड़ें। अपनी भावनायें प्रकट करने के लिए निम्नलिखित पद्धति के अनुसार संख्याओं का प्रयोग करें।

- अगर आप कथन से पूर्णतः असहमत है तो (0) लिखिये।
- अगर आप कथन से असहमत है तो (1) लिखिये।
- अगर आप कथन से ना तो सहमत है और ना असहमत तो (2) लिखिये।
- अगर आप कथन से सहमत है तो (3) लिखिये।
- अगर आप कथन से पूर्णतः सहमत है तो (4) लिखिये।

क्र.सं.

प्रश्न

1. मुझे खाली बैठकर आराम करने में समय व्यर्थ करना पसन्द नहीं है। ( )
2. जब मैं गुस्से में होता हूँ, तो अपशब्द बोलता हूँ। ( )
3. जब मैं बहुत गुस्से में हूँ तो दूसरों को कोसना मेरे लिए स्वाभाविक है। ( )
4. मैं अकेले बाहर जाने से कतराता नहीं हूँ और प्रायः समूह से अलग रहना पसन्द करता हूँ। ( )
5. मैं अधिकांशतः अन्य व्यक्तियों से अधिक व्यस्त जीवन व्यतीत करता हूँ। ( )
6. मैं प्रायः कार्यों को आवेग में करता हूँ। ( )
7. मुझे किसी को चोट पहुँचाना पसन्द नहीं है। ( )
8. मैं अधिक से अधिक समय अपने मित्रों के बीच व्यतीत करता हूँ। ( )
9. मेरा शरीर प्रायः अज्ञात कारण के जकड़ा हुआ महसूस होता है। ( )
10. मैं प्रायः भावात्मक रूप से विचलित हो जाता हूँ। ( )
11. यदि कोई मुझे ठेस पहुँचाता है तो मैं उसके बारे में बिल्कुल नहीं सोचता हूँ। ( )
12. मुझे सदैव कार्य करते रहना पसन्द है। ( )
13. मैं पूर्वनियोजित, निश्चित मार्ग एवं समयसारिणी के बिना यात्रा पर जाना पसन्द करूँगा। ( )
14. मैं अतिसंवेदनशील हूँ जिसकी वजह से मुझे दूसरों की विचारहीन टिप्पणियों एवं कार्यों से आसानी से ठेस पहुँच जाती है। ( )
15. मुझे बड़ी संख्या में औपचारिक मित्रों की आवश्यकता नहीं है। ( )
16. मुझे केवल आराम करते रहने और कुछ भी न करने में आनन्द का अनुभव हो सकता है। ( )
17. मुझे ऐसी नयी परिस्थितियों में आनन्द मिलता है जिसमें बदलते हुए हालात का पूर्वानुमान न हो सके। ( )
18. मैं आसानी से डर जाता हूँ। ( )
19. यदि लोग मुझे कष्ट पहुँचाते हैं तो उन्हें ये बताने में, मैं संकोच नहीं करता हूँ। ( )
20. मैं बड़ी पार्टियों में असहज रहता हूँ। ( )

22. मैं कभी-कभी घबराया हुआ महसूस करता हूँ। ( )
23. पार्टियों में, मैं अधिक लोगों से मिलने में आनन्दित होता हूँ, चाहे मैं उन्हें पहले से जानता हूँ या नहीं। ( )
24. मुझे कभी-कभी कुछ निर्भीक कार्यों को करने में आनन्द का अनुभव होता है। ( )
25. अवकाश के दिनों में, मैं आराम करने के स्थान पर सक्रिय खेलों में भाग लेना अधिक पसन्द करता हूँ। ( )
26. मैं किसी भी काम को एक बार करने का प्रयत्न अवश्य करूँगा। ( )
27. मैं प्रायः स्वयं के बारे में अनिश्चित अनुभव करता हूँ। ( )
28. मुझे कुछ समय के लिए समाज से अलग किसी स्थान पर रहने में संकोच नहीं है। ( )
29. मुझे कठिन परिश्रम या अभ्यास में स्वयं को थकाना पसन्द है। ( )
30. मुझे वह जीवन पसन्द है जिसमें व्यक्ति भ्रमण और यात्रा करे, वो भी बहुत से परिवर्तन और उत्तेजनाओं के साथ। ( )
31. मैं प्रायः उन कामों के लिए चिन्तित रहता हूँ जिसे और लोग महत्वहीन समझते हैं। ( )
32. जब लोग मुझसे असहमत होते हैं तो मैं उसने तर्क-वितर्क करने में संकोच नहीं करता हूँ। ( )
33. प्रायः मुझे अकेला रहना पसन्द है ताकि मैं वो काम कर सकूँ जिन्हें मैं बिना सामाजिक बाधाओं के करना चाहता हूँ। ( )
34. मैं कभी-कभी उन्मादी काम, केवल आमोद-प्रमोद के लिए करता हूँ। ( )
35. मैं बहुत सशक्त प्रवृत्ति का हूँ। ( )
36. मैं सुबह उठते ही सक्रिय रहना पसन्द करता हूँ। ( )
37. मैं उन लोगों के लिए थोड़ा असह्य हो सकता हूँ जिन्हें मैं पसन्द नहीं करता हूँ। ( )
38. मैं बहुत सामाजिक/मिलनसार व्यक्ति हूँ। ( )
39. मैं उनसे दोस्ती पसन्द करता हूँ जिनके व्यवहार का पूर्वानुमान ही न हो सके। ( )
40. मेरा मन कभी-कभी अकारण रोने को करता है। ( )
41. मुझे सदैव व्यस्त रहना पसन्द है। ( )
42. मुझे नयी और उत्तेजक वस्तुएँ और विचार प्रायः इस प्रकार आकर्षित कर लेते हैं कि मैं उसने होने वाली सम्भावित जटिलताओं के बारे में कभी सोच नहीं पाता हूँ। ( )
43. मैं मामूली बातों से खुद को परेशान नहीं होने देता हूँ। ( )
44. मैं तब भी सदैव धैर्य रखता हूँ जब लोग मुझे चिढ़ाने की कोशिश करते हैं। ( )
45. मैं प्रायः कार्यों को अकेले करना ही पसन्द करता हूँ। ( )
46. मैं प्रायः बिना किसी वास्तविक कारण के सहजता में भी असहज और बीमार महसूस करता हूँ। ( )
47. मैं सम्भवतः आवश्यकता से अधिक समय, मित्रों से मिलने-जुलने में व्यतीत करता हूँ। ( )
48. जब मैं काम करता हूँ तो उसे अत्यधिक ऊर्जा से करता हूँ। ( )
49. मुझे वे रोक-टोक और उन्मुक्त पार्टियाँ पसन्द हैं। ( )
50. जब लोग मुझ पर क्रोधित होते हैं तो मैं भी उन पर क्रोधित हो जाता हूँ। ( )

## भाग-2

### ORS – SCALE

**निर्देश :-** हर व्यक्ति की अपनी कार्य भूमिका के प्रति अलग-अलग भावनायें होती हैं। निम्नलिखित कथन इस प्रकार की कुछ भावनाओं को प्रकट करते हैं। कृपया इन कथनों को पढ़ें तथा उसके सामने दिये कोष्ठक में अपनी भावना को दर्शाने वाली संख्या लिखें। किसी भी कथन को बिना उत्तर दिए न छोड़ें। अपनी भावनायें प्रकट करने के लिए निम्नलिखित पद्धति के अनुसार संख्याओं का प्रयोग करें।

- अगर आपको ऐसा कभी नहीं लगता तो (0) लिखिये।
  - अगर अपने ऐसा बहुत कम अनुभव किया तो (1) लिखिये।
  - अगर आपको कभी-कभी ऐसा महसूस होता है तो (2) लिखिये।
  - अगर आपको प्रायः या अक्सर ऐसा लगता है तो (3) लिखिये।
  - अगर आपको सदा ही ऐसा लगता है तो (4) लिखिये।
1. मेरी भूमिका मेरे घरेलू जीवन में हस्तक्षेप करती है। ( )
  2. मुझे लगता है कि मैं अपनी वर्तमान भूमिका में आगे आने वाले उच्च उत्तरदायित्वों के लिए कुछ अधिक नहीं सीख पा रहा हूँ। ( )
  3. मैं अपनी भूमिका में विभिन्न लोगों की परस्पर विरोधी माँगों को संतुष्ट करने में असमर्थ हूँ। ( )
  4. कुछ समय से मेरी भूमिका का महत्व कम हो गया है। ( )
  5. मेरा कार्यभार बहुत अधिक है। ( )
  6. मेरे विभाग के अन्य साथी मेरी भूमिका को पर्याप्त ध्यान व समय नहीं देते। ( )
  7. मुझे अपनी भूमिका के उत्तर दायित्वों को निभाने के लिए पर्याप्त ज्ञान नहीं है। ( )
  8. मुझे अपनी भूमिका के ऐसे कार्य भी करने पड़ते हैं जो मेरे विवेक के विपरीत हैं। ( )
  9. मेरी भूमिका का कार्यक्षेत्र व जिम्मेदारियाँ क्या हैं यह मुझे स्पष्ट नहीं है। ( )
  10. मुझे दिए गए उत्तर-दायित्वों को निभाने के लिए आवश्यक जानकारी नहीं मिल पाती। ( )
  11. मेरे पास इतना समय नहीं है कि मैं अपनी पसंद के धार्मिक व सामाजिक कार्य कर सकूँ। ( )
  12. मैं वर्तमान भूमिका में इतना व्यस्त हूँ कि मैं आगे आने वाले उच्च उत्तर-दायित्वों के लिए अपने आप को तैयार नहीं कर पाता। ( )
  13. मैं अपने समकक्ष एवं जूनियर साथियों की परस्पर विरोधी माँगों को संतुष्ट करने में असमर्थ पाता हूँ। ( )
  14. बहुत से काम जो मेरे कार्यक्षेत्र में होने चाहिए थे दूसरों को दिये गये हैं। ( )
  15. मेरे कार्य की अधिकता के कारण उसकी गुणवत्ता में बाधा आती है। ( )
  16. मेरी भूमिका व अन्य भूमिकाओं में पर्याप्त सामंजस्य नहीं है। ( )
  17. काश मुझमें अपनी भूमिका के उत्तर-दायित्वों के निर्वाह के लिए और कौशल होता। ( )
  18. मैं अपने कार्य में अपने प्रशिक्षण व विशेषज्ञता का प्रयोग नहीं कर पाता हूँ। ( )
  19. मैं नहीं जानता कि जिन लोगों के साथ मैं कार्य करता हूँ वह मुझसे क्या अपेक्षा करते हैं। ( )
  20. अपनी भूमिका में प्रभावशाली होने के लिए मेरे पास पर्याप्त साधन नहीं हैं। ( )
  21. मुझे अपने कार्य के कारण अपने परिवार के लिये पर्याप्त समय नहीं मिल पाता। ( )
  22. मुझे अपनी भूमिका के सम्बन्धित आगे आने वाली चुनौतियों की तैयारी के लिए समय व अवसर नहीं मिल पाता। ( )
  23. मैं स्वयं को अपने क्लाइंट्स व अन्य लोगों की माँगों को संतुष्ट करने में असमर्थ पाता हूँ। ( )



24. मैं अपने वर्तमान उत्तरदायित्वों से अधिक उत्तरदायित्वों का निर्वाह करना चाहता हूँ। ( )
25. मुझे बहुत अधिक उत्तरदायित्व दे दिये गये हैं। ( )
26. मैं चाहता हूँ कि मेरी भूमिका व अन्य भूमिकाओं को निर्वाह करने वालों के बीच और अधिक परामर्श हो। ( )
27. अपनी भूमिका के निर्वाह के लिए मुझे विशिष्ट प्रशिक्षण (ट्रेनिंग) प्राप्त नहीं है। ( )
28. मुझे अपने संगठन के लिए जो काम करना पड़ता है, वह मेरी रुचि के अनुरूप नहीं है। ( )
29. मेरी भूमिका के कुछ पहलू अनिश्चित व अस्पष्ट हैं। ( )
30. मेरी भूमिका में मेरे साथ काम करने के लिए पर्याप्त लोग नहीं हैं। ( )
31. मेरा विभागीय उत्तरदायित्व मेरे अन्य उत्तरदायित्वों के बीच रूकावट डालता है। ( )
32. मेरी भूमिका में व्यक्तिगत विकास का बहुत कम अवसर है। ( )
33. मेरे वरिष्ठ (सीनियर) व कनिष्ठ (जूनियर) साथियों की मुझसे सम्बन्धित अपेक्षाओं में अक्सर टकराव रहता है। ( )
34. मुझे जो कुछ करने के लिए दिया गया है मैं उससे काफी कुछ अधिक कर सकता हूँ। ( )
35. मेरी भूमिका के कुछ हिस्सों को कम करने की आवश्यकता है। ( )
36. मेरे विभाग में समस्याओं का हल करने या कार्य योजना तैयार करने में सबको (मुझे मिलाकर) शामिल नहीं किया जाता। ( )
37. काश अपनी भूमिका के निर्वाह के लिए मैं और अच्छी तरह तैयार हुआ होता। ( )
38. अगर मुझे अपनी भूमिका स्वयं तय करने की स्वतन्त्रता होती तो मैं जो कुछ रह रहा हूँ उससे हटकर और भी कुछ करता। ( )
39. मेरी भूमिका पूरी तरह और विस्तार से स्पष्ट नहीं की गई है। ( )
40. अपनी भूमिका के निर्वाह के लिए मेरे पास आवश्यक सुविधाओं की कमी है। ( )
41. मेरे परिवारजनों एवं मित्रों को शिकायत है कि मैं अपने काम की अधिकता के कारण उनके साथ अधिक समय नहीं बिता पाता हूँ। ( )
42. मुझे लगता है कि अपनी भूमिका में मेरा विकास नहीं हो रहा है। ( )
43. विभिन्न लोग मेरी भूमिका के सम्बन्ध में परस्पर विरोधी अपेक्षाएँ रखते हैं जिससे मुझे परेशानी होती है। ( )
44. मेरी इच्छा है कि मुझे और चुनौतीकरण कार्य दिए जायें। ( )
45. मैं अपनी भूमिका में अपने ऊपर बहुत अधिक भार महसूस करता हूँ। ( )
46. जब भी मैं किसी चर्चा या सहायता की पहल करता हूँ तो मुझे अपने साथियों का अधिक समर्थन और सहयोग नहीं मिलता। ( )
47. मुझे अपनी भूमिका को प्रभावशाली ढंग से करने के लिए अधिक प्रशिक्षण (ट्रेनिंग) व तैयारी की जरूरत है। ( )
48. अपनी भूमिका के निर्वाह में मेरे द्वारा किये जाने वाले कार्य और अपने मूल्यों के बीच विरोधाभास का अनुभव होता है। ( )
49. मुझे स्पष्ट नहीं है कि मेरी भूमिका की प्राथमिकताएँ क्या हैं। ( )
50. काश मुझे दिए गये कार्य के लिए और अधिक वित्तीय साधन उपलब्ध होते। ( )

### भाग-3

कृपया इन प्रश्नों के भी उत्तर दीजिए :

1. आपको अपनी नौकरी में क्या बात सबसे अधिक परेशान करती है ?

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2. आपकी राय में आपके समकक्ष सहयोगियों को क्या बात सबसे अधिक परेशान करती है ?

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3. कृपया लिखिये कि अन्तिम बार अपनी नौकरी में किस बात से आपको सबसे अधिक परेशानी हुई ?

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4. कृपया लिखिये कि अन्तिम बार अपनी नौकरी में किस बात से आपको सबसे अधिक प्रसन्नता हुई।

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5. क्या आप चाहेंगे कि आपकी सन्तान भी आपका ही पेशा अपनाये ? हाँ/नहीं, कृपया कारण स्पष्ट करें।

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नाम : \_\_\_\_\_ आयु \_\_\_\_\_ कुल कार्य अनुभव \_\_\_\_\_

पद \_\_\_\_\_ संस्था \_\_\_\_\_ शिक्षा \_\_\_\_\_

वैवाहिक स्तर \_\_\_\_\_ यदि विवाहित है तो पति/पत्नी का व्यवसाय : \_\_\_\_\_

पता \_\_\_\_\_

E-mail ID : \_\_\_\_\_ धर्म \_\_\_\_\_

दिनांक \_\_\_\_\_

नगर \_\_\_\_\_

### **Appendix 3: A Note on Statistical Techniques used in the Study**

#### **1. Exploratory Factor Analysis**

Many scientific studies are featured by the fact that numerous variables are used to characterize objects (Rietveld & Van Hout, 1993). These include studies in which survey has a lot of instrument (construct) (Darlington, 2004). Using a large number of variables can complicate a study. Another drawback is that some variables could measure different aspects of a same underlying variable. In such cases, exploratory factor analysis is used. It will help researcher to ensure that instrument he used is actually represent the variables measure he mean to investigate (Abbas, 2009). Exploratory factor analysis (EFA) attempts to discover the nature of the constructs influencing a set of responses. The key objectives of an EFA are to determine the number of common factors influencing a set of measures and the strength of the relationship between each factor and each observed measure (DeCoster, 1998).

#### **2. Confirmatory Factor Analysis**

EFA is data driven (Brown, 2006). Each common factor is assumed to affect every observed variable and that the common factors are either all correlated or uncorrelated. Once model is estimated, factor scores, proxies of latent variables, are calculated and used for follow-up analysis (Hatcher, 1994) *Confirmatory factor analysis* (CFA), on the other hand, is theory- or hypothesis driven. With CFA it is possible to place substantively meaningful constraints on the factor model. The researcher can assess the contribution of each scale item and determine how well the scale measures the concept (Hair et al., 1998). Researchers can specify the number of factors or set the effect of one latent variable on observed variables to particular values. CFA allows researchers to test hypotheses about a particular factor structure (e.g., factor loading between the first factor and first observed variable is zero).

#### **3. T-test**

T-test is a parametric test. It is considered an appropriate test for judging the significance of a sample mean or for judging the significance of difference between the means of two samples in case of small sample (s) when population variance is not known (Kothari, 2004). The test is based on t-distribution. The t-distribution is similar to normal distribution in appearance.

However, as compared to the normal distribution, the t-distribution has more area in the tails and less in the centre (Malhotra, 2007). T-test involves three types of investigations, namely, One sample t-test, Two Independent sample t-test and Paired sample t-test.

#### **4. Analysis of Variance (ANOVA) test**

ANOVA are used for examining the difference in the mean values of the dependent variable associated with the effects of the controlled independent variables, after taking into account the influence of the uncontrolled variables. This test is used as a test of means for two or more populations (Malhotra, 2007). ANOVA is based on F-distribution. The test is also used for judging the significance of multiple correlation coefficients. F-test also has two kinds, namely one way ANOVA and n-way ANOVA. One-way analysis of variance involves only one categorical variable or a single factor while n-way ANOVA involves more than one categorical variable.

#### **5. Correlation**

Correlation is a general term used to describe the fact that two or more variables are related (Oxford Dictionary of Statistics). Galton first introduced the term in the year 1869. The correlation between the graphs of two data sets is the degree to which they resemble each other. However, correlation is not the same as causation, and even a very close correlation may be no more than a coincidence. Mathematically, it is expressed by a correlation coefficient that ranges from -1 (never occur together), through 0 (absolutely independent), to +1 (always occur together). The strongest correlations are at both extremes of continuum and provide the best predictions (Britannica concise encyclopedia).

#### **6. Structural equations modeling (SEM)**

Structural equation modeling (SEM) is used as a means to analyze the hypothesized relationships. It is a statistical methodology that takes a confirmatory (i.e., hypothesis-testing) approach to the analysis of a structural theory bearing on some phenomenon. Typically, this theory represents “causal” processes that generate observations on multiple variables (Bentler, 1988). SEM starts with a theoretically based model, which is transformed into a path diagram. It does not only allow researchers to analyze a set of latent factors like independent and dependent

variables in regression analysis (Segars and Grover 1993), but also provides a comprehensive means assessing and modifying theoretical models (Karahanna and Straub 1999; MacKenzie 2001). SEM is able to accommodate multiple interrelated dependence relationships in a single model. It provides a confirmatory test to a series of causal relationships.

SEM generally assumes linear relationships, although it is possible to account for nonlinearity (Hair et al. 1998). The present study uses a maximum likelihood estimation (MLE) based on the variance-covariance matrix. Maximum likelihood estimation is commonly used in practice. It provides consistently efficient estimation under the assumption of multivariate normality. It is relatively robust against moderate departures (Diamantopoulos et al., 2000). This study uses reflective measurement models to estimate the base model, rather than formative indicators (Diamantopoulos et al., 2001). As such, it is assumed that the latent variable causes the observed items, instead of the items causing the latent variable. It is also a challenge for the researcher to decide whether to specify the observed items as reflective or formative indicators of the latent constructs (Jarvis et al., 2003; Parasuraman et al., 2005). With formative models it is necessary to include all relevant concepts that form the construct, because dropping an indicator may alter the meaning of the construct. Therefore, there has to be a very high level of agreement among researchers on the factors that determine each latent construct. On the other hand, with reflective models the meaning generally does not alter when dropping an item (Jarvis et al. 2003). While keeping this point in mind, the reflective measurement models have been used in this study to estimate the base model.

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## Organisational role stress: the conceptual framework

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**Abstract:** Stress is the inability to cope with the pressures of a job. Stress at the workplace is the result of rapid changes in all aspects viz. urbanisation, modernisation, industrialisation etc. This paper qualitatively aims to identify the causes of organisational stress and their consequences. It will explore the basis for treatment of employees in organisation to minimise their stress in terms of work overload, role ambiguity, role stagnation, personal inadequacy, role isolation and various other stressors. The research supplements the existing body of research and suggests some remedial measures to cope with stress and proposes a framework for organisational stress at the workplace.

**Keywords:** organisational stress; causes; consequences; coping.

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## 1 Introduction

This age is the age of science and technology but at the same time this can also be aptly described as an *age of anxiety* or the *century of stress*. The fast pace of change has led to an increase in health related problems. Health professionals believe that many of these problems are a result of tensions, depression, discontentment, disappointment and anxieties faced by people (Charlesworth and Nathan, 1982). Stress is an integral part of human life. In fact some stress is essential for growth and goal accomplishment. However, if the external demands exceed beyond a person's capacity, a burnout condition may occur. It can lead to stress related disorders. These negative fall outs can be addressed if the person is aware of various factors responsible for his/her stressful condition and how these effects can harm him/her physically and psychologically. The awareness of stress and its control is the primary focus of stress management (Gibbons and Gibbons, 2007). There is a need to reduce the stress to its optimum level in order to enhance performance and to decrease various physical and psychological harms. This is the main focus of the present paper. Here, we will discuss the conceptual framework of organisational role stress, its causes, consequences and prevention strategies to minimise the ill-impact of stress.

## 2 Objectives

The main objectives of this conceptual study are as follows:

- to know about the organisational role stress
- to identify various causes of organisational stress i.e., stressors

- to assess the consequences of organisational role stress on individuals as well as the organisation
- to identify various coping strategies by reviewing the literature
- to develop a framework showing the relationship among stressors, consequences and coping strategies.

### 3 Stress

Stress occurs when external demands exceed from the internal capabilities of a person. Stress can also be defined as any critical event or any internal drive, which threatens to upset the organism's equilibrium (Selye, 1956). Stress can be a force, pressure, strain or strong effort, referring primarily to an individual or to an individual's organs or mental powers (Hinkle, 1973). Primarily, stress was a popular concept in the physiological world, where it was started, the concept of stress continued to flourish in the psychological and social fields. Now the term stress has a wide use in relation to work organisations (Agarwala et al., 1979). Stress has also been defined as a stimulus, a response or the result of an interaction between the person and the environment, in term of some imbalance between the two (Cox, 1981). Another definition of stress can be, the result of the transaction between the person and the environment (Lazarus, 1990). These definitions of the stress mainly focus on the dynamic relationship of the person and the environment and how this concept may get generated as a result.

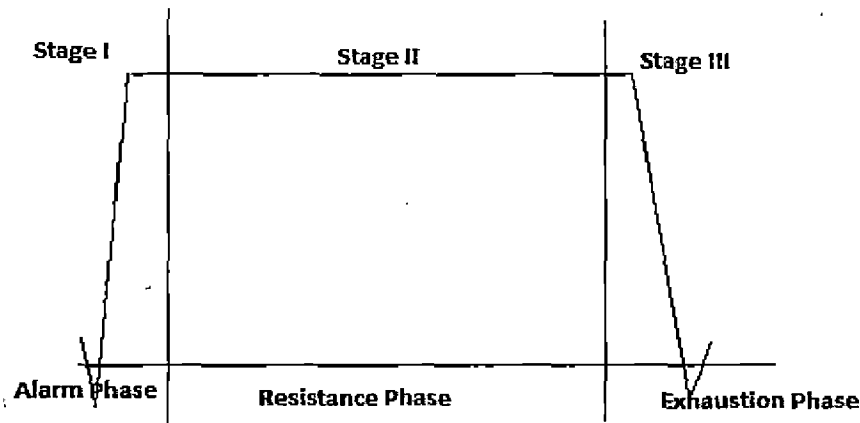
#### 3.1 Stress mechanism

When an individual copes with stress, a typical response pattern is found. Selye (1956) termed this response pattern as general adaptation syndrome (GAS). The stress mechanism has three stages; alarm reaction, stage of resistance and stage of exhaustion (Figure 1). The first stage is *alarm reaction*. It is the organism's response when the organism is suddenly exposed to diverse stimuli to which it is not adapted. The reaction has two phases namely the shock phase and counter shock phase. The shock phase is the initial and immediate reaction to the noxious agent. The counter shock phase is the rebound reaction, which is marked by the mobilisation of defensive phase. The alarm reaction stage is not the entire process for stress because no organism can remain continuously in this state, if the agent is so drastic that this continued exposure becomes incompatible with life, the encountered animal dies during the alarm stage within the first hours or days. If it does not happen and if it survives, alarm reaction is followed by the stage of resistance.

The second stage is *stage of resistance*. This stage is primarily on endocrinal metabolic phase. The principal mediator of the cortical phase is cortisol released from the adrenal cortex. The cortisol protects the organism not from the stressor but from the normal defensive reactions of the organism. This can cause significant collateral damage of the organics. If the stressor persists, it becomes necessary to attempt some means of coping with the stress. Although the body begins to try to adapt to the strains or demands of the environment, the body cannot keep this up indefinitely, so its resources are gradually depleted.



Figure 1 Stress mechanism



Source: Selye (1956)

Third stage is *stage of exhaustion*. Since adaptability is finite, exhaustion inexorably follows, if the stressor is sufficiently severe. Symptoms again appear. If the stress continues unabated, death can cause. At this point, all of the body's resources are eventually depleted and the body is unable to maintain normal function. At this stage, the initial autonomic nervous system symptoms may reappear (sweating, raised heart rate etc.). If stage three is extended, long term damage may result as the capacity of glands, especially the adrenal gland, and the immune system is exhausted and function is impaired resulting in decomposition.

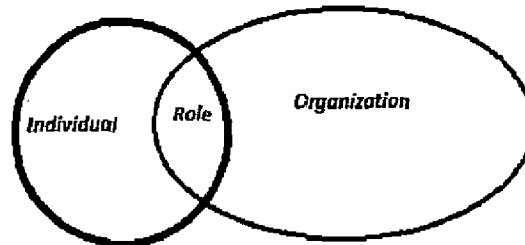
### 3.2 Organisational role stress

Role is a set of obligations, generated by 'significant' others. It denotes the set of functions which any individual performs in response to the expectations of the 'significant' others and his/her own expectations from his/her position in the workplace [Pareek, (1993), p.3].

Organisation and individual both have different types of needs due to different situations and different structures. As Figure 2 shows, the interaction between these two gets integrated in a role. Office is a concept which is a relational and power centred. Office is a point in the social structure defining an office holder's power. Thus, the role is an integrated and summation of all behaviours expected from a person occupying the office [Pareek, (1993), p.4]. For example, the Indian mother occupies a significant position in the family structure and has different obligations with different family members and plays multiple roles. Stress is an inevitable outcome of socio-economic complexity and sometimes a stimulant also. An organisation has many departments like production, marketing, finance, manufacturing, personnel etc. In addition to macro organisational sub-systems like inter organisational system, organisational goals, climates, cultures etc (Figure 3). These all systems contribute in organisational growth and their roles have many responsibilities for all stakeholders and society also. Many a times, the individual feels himself like a cog in the wheel of total technological setup.

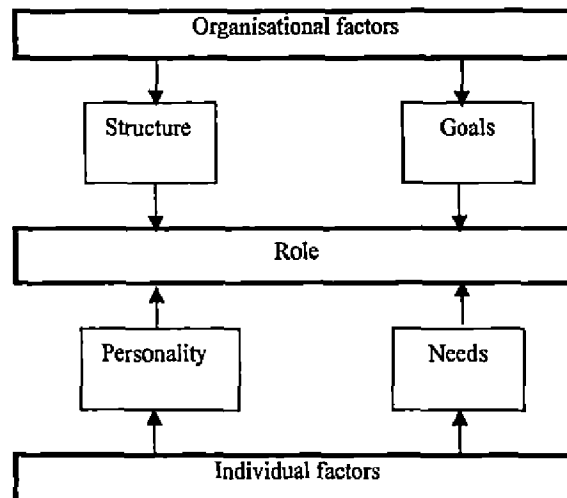
This tends to generate the feelings of powerlessness, meaninglessness, normlessness, and consequent stress [Pestonjee, (1999), p.87].

Figure 2 Organisational role



Source: Pareek (1993)

Figure 3 A model of role as a function of organisation and individuality



Source: Pareek (1993)

### 3.3 Organisational role stressors

There are ten role stressors, as Pareek (1993) defined, as follows:

- 1 *inter role distance (IRD)*: 'conflict between the organisational and non-organisational roles'
- 2 *role stagnation (RS)*: 'feeling of being stuck in the same role'
- 3 *role expectation conflict (REC)*: 'conflicting expectations and demands by the different role senders'
- 4 *role erosion (RE)*: 'feeling that functions which should belong to incumbent's role are being transformed/performed or shared by other roles'

- 5 *role overload (RO)*: 'feeling that too much is expected from the role than what the occupant can cope with'
- 6 *role isolation (RI)*: 'lack of linkages of one's role with other roles in the organisation'
- 7 *personal inadequacy (PI)*: 'lack of knowledge, skills or adequate preparation to be effective in a particular role'
- 8 *self-role distance (SRD)*: 'conflict of one's values and self-concepts with the requirements of the organisational role'
- 9 *role ambiguity (RA)*: 'lack of clarity about expectations of others from the role, or lack of feedback on how performance is regarded by others'
- 10 *resource inadequacy (RIIn)*: 'non-availability of resources needed for effective role performance'.

#### 4 Causes of organisational role stress

The workplace stands out as a potentially important source of stress purely because of the amount of time that is spent in this setting [Erkutlu and Chafra, (2006), p.287]. Cooper and Marshall (1976) identified seven categories of stress, including six external and one individual. These are factors intrinsic to job (too much or too little work, poor working conditions, work overload, time pressure etc.), role in organisation (role ambiguity, role conflict, responsibility of peoples etc.), career development (under or over promotion, job insecurity etc.), organisational interface (company vs. family demands, company vs. own interests), organisational structure (restriction on behaviour, office politics etc.) relationship with organisation (poor relationship with supervisor, peers and subordinates etc.) and stressors due to individual differences (personality, coping capability, behavioural pattern etc.).

Hurrell et al. (1988) identified five groups of stressors namely organisational practices (performance reward systems, supervisory practices, promotion opportunities), job/task features (workload, work pace, autonomy), organisational culture/climate (employee value, personal growth, integrity), interpersonal relationships (supervisors, co-workers, customers), and employee personal characteristics (personality traits, family relationships, coping skills) while Burke (1993) classified job stressors into the following six categories: physical environment, role stressors, organisational structure and job characteristics, relationships with others, career development, and work-family conflict. On the basis of complexity and contemporary business environment and organisational life, altogether, causes of organisational stress can be grouped into two main groups:

- 1 *job related stressors*, with three major subgroups – environment specific, organisation specific, and job specific stressors (Table 1)
- 2 *individual-related stressors*, which can be either a consequence of individual characteristics or a consequence of individual life circumstances, as Table 2 depicts.

**Table 1** Job related stressors

<i>Environment specific</i>	<i>Organisational specific</i>	<i>Job specific</i>
Economic conditions	Changes within organisation	Poor fit between abilities and skills
Increased levels of competition	Reorganisations	Work overload
Market changes	Delaying	Work place
Technological development	Lay-offs	Pressure to work longer hours
Changes in production and products	Organisational structure	Job characteristics
Drive for greater cost-effectiveness	Organisational culture/climate	Conflicting job demands
Networks	Mergers/acquisitions and similar	Unclear job expectations
Multination's	changes in company ownership	Pressure of responsibility
General public concern for the environment	workforce diversity	Time pressure
	Reward systems	Lack of resources to perform job
	Promotion policy	Lack of information
	Job security	

**Table 2** Individual related stressors

<i>Individual characteristics</i>	<i>Individual life circumstances</i>
Personality traits	Work/life conflict
Demographic characteristics	Family problems
Coping skills, etc.	Personal problems
	Financial difficulties etc.

*Source:* Cooper and Marshall (1976) and Burke (1993)

## 5 Consequences of stress

Stress produces a range of undesirable, expensive, and enfeebles consequences. These negative outcomes impact both individuals and organisations. In organisational setting, stress is nowadays playing the role of major contributor to health and performance problems of individuals, and unwanted occurrences and costs for organisations. *Consequences of occupational stress can be identified on all individual, organisational and social levels. On the individual level, there are three main subgroups of strains.*

### 5.1 At individual level

The after-effects of organisational stress among individuals can be physical and psychological both (Greve, 2002; Ruback and Thompson, 2001). Other ill-impacts may be exaggerated reactions to stress and the fear of enduring other attacks (Barling et al., 2001; Rogers and Kelloway, 1997) often lead to health problems like depression, psychosomatic disorders etc. among victims of stressful conditions (Budd et al., 1996; Hoel et al., 2001; Hurrell et al., 1988). In 10 to 18% of cases, victims may develop the criteria of posttraumatic stress disorder (PTSD), (Flannery, 1995; Warshaw and Messite,

1996; Teegen, 2002). PTSD is defined by the simultaneous presence of symptoms belonging to three distinct groups of symptoms: avoidance symptoms, intrusions and hyper-activation.

PTSD may be associated with disorders (co-morbidity) like: anxiety, depression, somatic problems, personality disorders (Deering et al., 1996; Maercker, 2003) or suicidal tendencies. The symptoms of reduction in concentration, reduction in self-esteem, as well as social withdrawal, particularly have a negative effect on concerning work (Brady, 1999). Posttraumatic reactions and negative effects concerning work related stress have been also observed among bank employees who were victims of a holdup as well as among workers in other areas (De Boer et al., 1999; Miller-Burke et al., 1999; Tarquinio et al., 2004). In summary, the following ill-effects can be seen at individual level.

The stress can result in unwanted feelings and behaviours such as job dissatisfaction, lower motivation, lower employee morale, less organisational commitment, lowered overall quality of work life, absenteeism, turnover, intention to leave the job, lower productivity, decreased quantity and quality of work, inability to make sound decisions, more theft, sabotage and work stoppage, occupational burnout, alienation, and increased smoking and alcohol intake. The symptoms of stress can be seen by many physiological diseases – such as increased blood pressure and pulse rate, cardiovascular diseases, high cholesterol, high blood sugar, stomach disorders, insomnia, headaches, infections, skin problems, suppressed immune system, injuries, and fatigue. The consequences of stress can also be found in poor mental health – psychological distress, depression, anxiousness, passiveness/aggressiveness, boredom, loss of self-confidence and self-esteem, loss of concentration, feelings of futility, impulsiveness and disregarding of social norms and values, dissatisfaction with job and life, losing of contact with reality, and emotional fatigue. The most difficult stress consequence for an individual is burnout condition. Maslach and Jackson (1981, p.99) defined burnout as “a syndrome of emotional exhaustion and cynicism that occurs frequently among individuals who do ‘people work’ of some kind”. Burnout is presumed to be a causative factor in poor quality of care, absenteeism, turnover, use of alcohol and drugs, insomnia, and family problems (Maslach, 1979; Maslach and Pines, 1977; Pines and Maslach, 1978).

## 5.2 *At organisational level*

The after-effects of organisational stress are manifested both on the level of the productivity and the competitiveness of the enterprise, for example, by an increase in absenteeism (Southerland et al., 1997; Warshaw and Messite, 1996). The extent of the economic prejudice to organisations caused by these stressful situations is not easy to evaluate but a report of WHO says that it can cost up to 10% of GDP of any country. Although the direct economic and material cost can be calculated (Walter, 1993), it is not totally possible to anticipate it and therefore, it cannot be calculated all of the long-term and indirect effects on the organisation. It is also not possible to anticipate all of the psychological and health-related consequences that a stress act will have on the individual concerned (Brakel, 1998; Elliot and Jarrett, 1994). The costs following a reduction in productivity due to psychological traumas, which still persist, can be considerable (Jenkins et al., 1992).

The other negative consequence can be seen as a decrease in the commitment to the enterprise (Rogers and Kelloway, 1997; Schat and Kelloway, 2000), by a withdrawal from activities unrelated to professional activities (Barling et al., 2001), by dissatisfaction concerning one's job (Budd et al., 1996) or even by the search for a new job or a new work station (LeBlanc and Kelloway, 2002). In summary, the consequences of stress on organisation can be as follows.

Stress can result in critical organisational symptoms – such as discontent, dissatisfaction and poor morale among the workforce, performance/productivity losses, low quality of products and services, poorer relationships with clients, suppliers, partners and regulatory authorities, losing customers, bad publicity, damage to the corporate image and reputation, missed opportunities, disruption to production, high accident and mistakes rates, high labour turnover, loss of valuable staff, increased sick-leave, permanent vacancies, premature retirement, diminished cooperation, poor internal communications, more internal conflicts, and dysfunctional workplace climate. In addition to it, organisations have to pay the stress cost – such as costs of reduced performance/productivity (lack of added value to product and/or service), high replacement costs in connection with labour turnover (increase in recruitment, training and retraining costs), increased sick pay, increased health-care costs and disability payments, higher grievance and litigation/compensation costs, and costs of equipment damage.

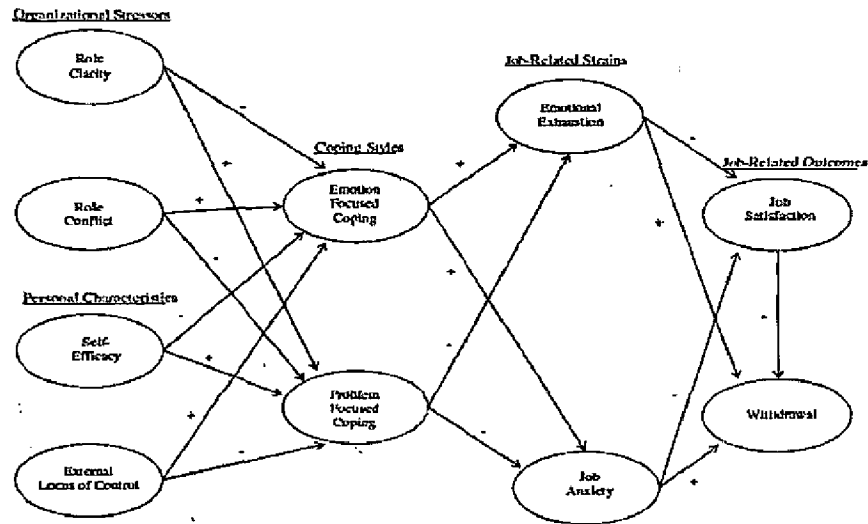
### *5.3 At social level*

In addition to the costs to the individual and the organisation, the costs to the society must also be mentioned. Research studies found that traumas as well as work absenteeism for long periods or early retirement can be considerable (Chappell and DiMartino, 2000). Regarding traumatic experiences, we must point out that it is not only the victims, but also the witnesses of violent acts who react with similar symptoms and who should be treated (Rogers and Kelloway, 1997; Leather et al., 1998). It is observed that society has to pay cost of stress by many ways. On the level of social interactions, inappropriate reactions on the part of the victim's family and friends in particular like manifested distress, inadequate help, isolating the victim, etc., can lead to a secondary victimisation (Montada, 1988).

## **6 Coping strategies**

Stress prevention is called stress coping. Coping are the cognitive and behavioural efforts made to master, tolerate or reduce external and internal demands and conflicts among individuals [Folkman and Lazarus, (1980), p.34]. Figure shows that coping style may be of two type's viz. problem focusing coping and emotional focusing coping. But there are one another coping strategy is also prevalent which is somewhat similar to emotional focusing, but have some distinct characteristics. This coping strategy is known as avoidance coping, which has some negativity. But this is used frequently by employees at workplace. They try to avoid the situations.

Figure 4 Coping mechanism



Source: Boyd et al. (2009)

There are many coping strategies or prevention strategies for managing work related stress, given by different researchers but some of them are given in Table 3.

Table 3 Coping strategies

S. no.	Stress prevention strategy	Proponent
1	Talk with other person sympathetically	Walsh (1975)
2	Build work-group norms of cooperation not competition	De Ville (1970)
3	Delegate, seek help of others	De Ville (1970)
4	Develop satisfactory relationship with supervisor	De Ville (1970)
5	Plan instead of responding to pressure	Howard (1978)
6	Divert attention from stressful situation	Uris (1972)
7	Increase self awareness – what causes stress? And how we respond to stressful situations?	Uris (1972)
8	Hobbies, leisure activities, recreation	De Ville (1975)
9	Professional counselling and therapy, group therapy	Langner (1970)
10	Tranquillisers, drugs	McCann (1972)
11	Leave job for another	McCann (1972)

Source: Burke and Weir (1980)

**Table 3** Coping strategies (continued)

<i>S. no.</i>	<i>Stress prevention strategy</i>	<i>Proponent</i>
12	Change to leisure tasks guaranteeing immediate satisfaction	McCann (1972)
13	Proper nutrition and diet	Marks and Banack (1977)
14	Short or long breaks	Marks and Banack (1977)
15	Pamper your body sleep	Marks and Banack (1977)
16	Training	Marks and Banack (1977)
17	Have yearly medical check-up	Walsh (1975) and McCann (1972)
18	Meditation	Walsh (1975)
19	Take vacation and holiday time	Marks and Banack (1977) and Walsh (1975)
20	Physical exercise	Walsh (1975) and De Ville (1970)
21	Work smarter not harder	Howard et al. (1975)

*Source:* Burke and Weir (1980)

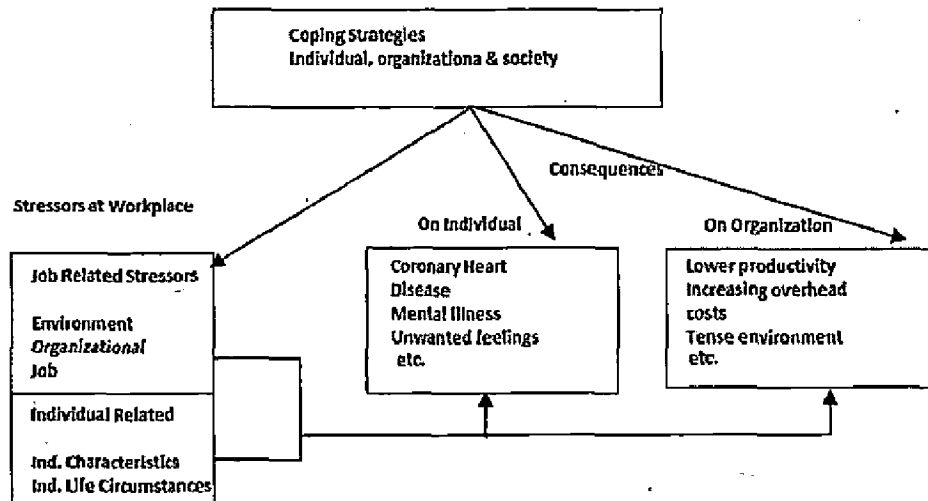
After going through literature review, it is quite clear that stress research is a popular field of enquiry among management researchers. A number of studies have been carried out in varied settings and sectors in India and abroad. We have tried to quote some of those researches to clear the concept of organisational stress, causes of stress i.e. stressors, consequences of stress and some prevention strategies to minimise or reduce stress at workplace.

## 7 Conclusions

It is observed by many studies that organisational stress can be minimised even eliminated when one is helped to understand what is organisational stress, what are the causes of work stress, what are the consequences of stress and how can it be coped. The present paper is concerned with the same objectives and we have tried to discuss these particular aspects related to organisational stress. At the end of paper, the developed Figure 5 clearly shows the relationship among stressors, strains and coping strategies. The consequences of stress have great harms for both individual and organisation. Therefore, it is essential for individuals, organisations, management, society and researchers to work for reducing stress to its optimum level, so that employees may get a healthier and satisfied life and organisation may find a healthy workforce with high morale and productivity. We, too, attempted to work for the same purpose. Stratton once said that people under stress make mistakes. Therefore, I want to conclude with these words that manage stress, we need you all healthy.



Figure 5 Conceptual model of organisational role stress



Source: Developed by author

## 8 Managerial implications

The paper will help the organisations in developing the stress management strategies both for individuals and organisations, after keeping in mind the causes and consequences of stress at workplace. It will also help employees in managing their stress at personal level.

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